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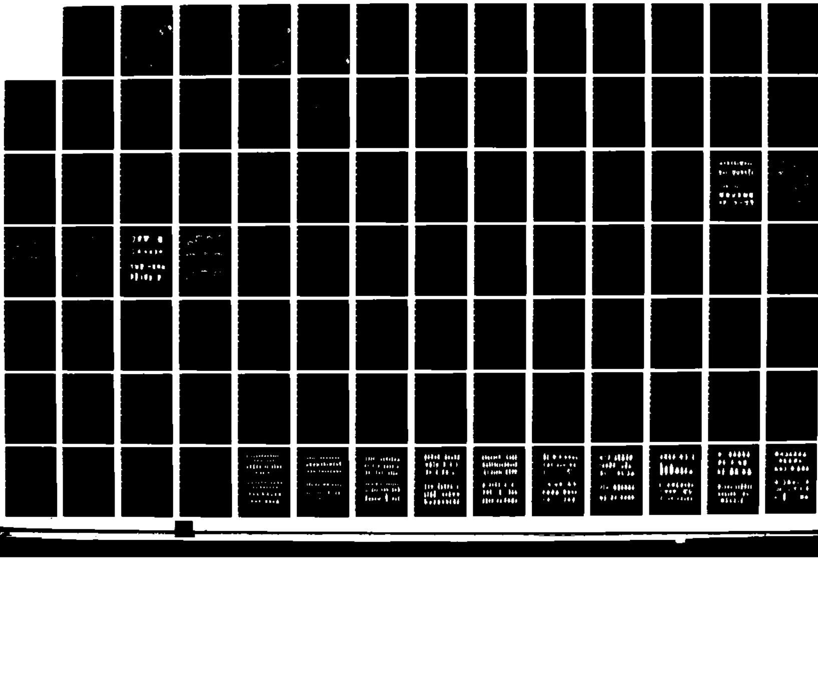

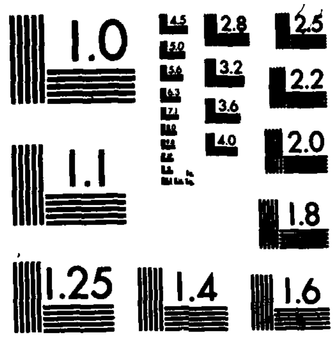

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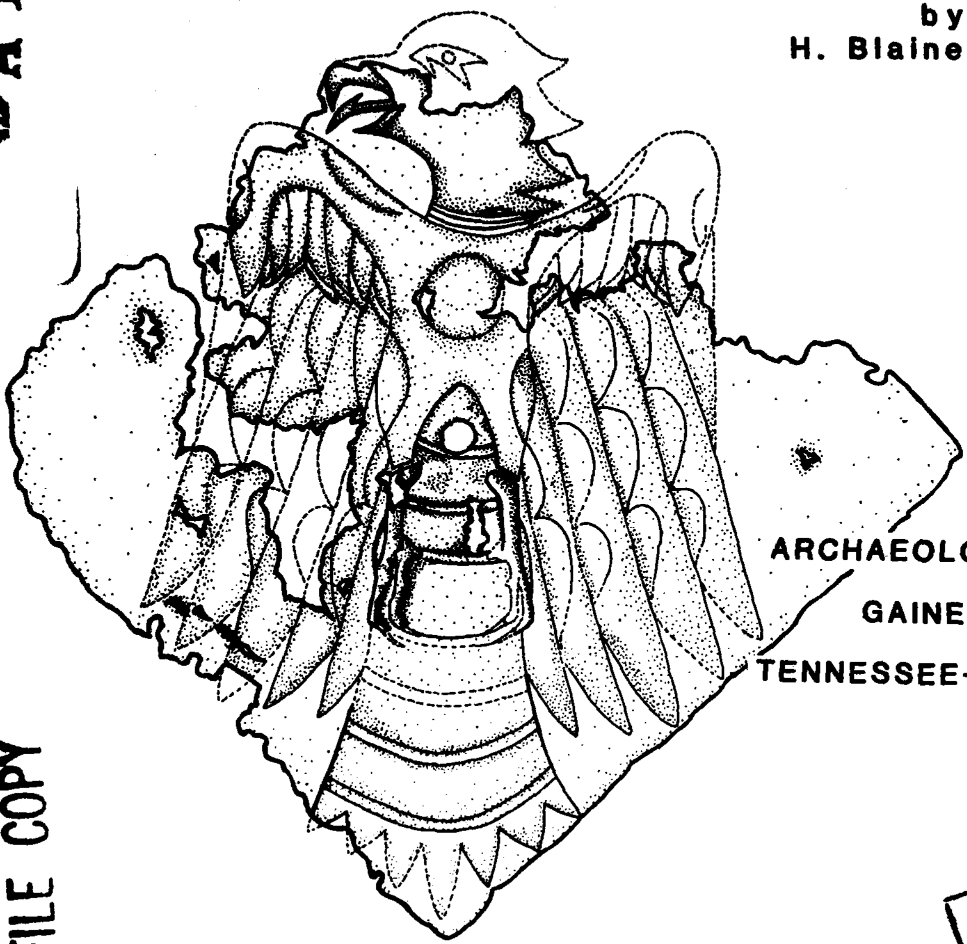
GAINESVILLE LAKE AREA LITHICS: CHRONOLOGY, TECHNOLOGY AND USE

by
H. Blaine Ensor



VOLUME III
OF
ARCHAEOLOGICAL INVESTIGATIONS
IN THE
GAINESVILLE LAKE AREA
OF THE
TENNESSEE-TOMBIGBEE WATERWAY

Report of Investigations No. 13
Office of Archaeological Research
The University of Alabama
1981

Prepared for
The U.S. Army Corps of Engineers,
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Alabama's first university

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Five prehistoric sites within the impact zone of the Gainesville portion of the Tennessee-Tombigbee Waterway were excavated under this contract.

This volume documents the lithic analysis. Other volumes present the excavations (Volume 1), ceramic description (Volume 2), the biocultural studies (Volume 4), and the synthesis (Volume 5).

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by
H. Blaine Ensor

Volume III
of
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A Report Prepared in Cooperation with
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of Contract No. DACW01-76-C-0120

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The University of Alabama
University, Alabama
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ACKNOWLEDGMENTS

This volume contains the results of 20 months of investigation of prehistoric lithic remains recovered during the past 10 years from the Gainesville Lake segment of the Tennessee-Tombigbee Waterway. Most of the stone artifacts were excavated from five sites: Site 1GrlX1, Site 1Gr2, Site 1Gr50, Site 1Pi61, and Site 1Pi33. In addition, projectile points collected previously were used in the analysis.

It is not always easy to adequately acknowledge the contributions made by other people to one's research. Those not directly named here know their contribution which is deeply appreciated. Certain other individuals and agencies played roles of such importance that they must be properly acknowledged.

The U.S. Army, Corps of Engineers, Mobile District, in particular archaeologists Jerry J. Nielsen and Ernest Seckinger, should be commended for their understanding, advice, help and interest.

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Dr. Christopher Peebles, University of Michigan, Museum of Anthropology, provided the lithic inventory from Site 1Pi33.

The University of Alabama Museum of Natural History provided laboratory space at Mound State Monument during a portion of the project.

Michael Wilson aided the author in the analyses and trained personnel during the analysis of 1Pi33 lithics. He also participated in the thermal alteration experiments and contributed his expertise in flint knapping.

Laboratory workers who helped include Randall Holland, Polly Futato, David Paudler, and Stephanie Foley.

Tommy Kimbrell generously loaned the author specimens for study; Hurston Holland drew the lithics artifacts; Rick Wright provided an artist's reconstruction of the copper plate; Linda Burnett typed the final draft; Beverly Curry and Linda Burnett typed most of the first draft; and Elizabeth Meadows typed the figure captions and the table headings.

Dr. J.O. Vogel made some editoral suggestions.

The usual disclaimers hold and absolve all those named from any errors, either of omission or commission, contained in the following report.

H. Blaine Ensor

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Staff Archaeologist

Carey B. Oakley

Carey B. Oakley, Director
Office of Archaeological Research
University of Alabama

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In the past, attribute-identification procedures have been formulated to meet the particular requirements of a specific data set and have been characterized by ad hoc adjustments in the decision-making process when specimen inclusion within a given category was in doubt. Such procedures are subjective and, therefore, cannot be verified by independent investigators. The position taken here is that all conclusions about the meaning of archaeological data, whether inherently correct or not, based upon intuition-bound notions of culture and loose formulations of interpretive procedure, are indefensible because they cannot be independently verified and because they can generate no evaluative mechanisms by means of which preference for one conclusion over another may be demonstrated. This is not to deny a productive role to intuition. The point is that intuitive formulations cannot of themselves lead to internally satisfying results. Intuition *provides a creative element* to theory formulation and model building, but that creativity must be evaluable. These considerations provide strong motivation for a systematization of archaeological methodology.

(Wilmsen 1970:196)

CHAPTER I

INTRODUCTION

Many stone artifacts were recovered during the 1976 and 1977 field seasons in the Gainesville Lake area. Of these nearly 300,000 came from five excavated sites; 1GrlXl, 1Gr2, 1Gr50, 1Pi61 and 1Pi33. These form the basis of the study collection.

One overriding consideration of this study was the utilization of standard terms and categories relative to these specimens. This was premised in the belief that consistent and systematic usage would aid other researchers. As a further aid to anyone who would wish to incorporate the system in their own investigations, the ideas which guided my classification are stated.

Some currently held attitudes toward the explanation of culture change regard technology as part of an environmentally adaptive, but integrated cultural system (Harris 1968). Therefore, the correlation of variables within a cultural ecosystem is of some importance to the derivation of causal explanations for observed data. Analysis of archaeological manifestations must, therefore, be standardized, holistic and at a consistent level of abstraction. This permits pertinent discussion of such matters as level of technological development, subsistence techniques, and settlement patterns among others. Perception of these sub-systems with respect to a given ecological zone may permit us to explain significant aspects of culture process.

The virtue of a systemic approach is the capability of describing the entities recovered as the parts of several simultaneous sub-systems and thus expand our facility to explain human activities in the past. One such sub-system is stoneworking, which may be viewed as a component of technology as well as the mode of production of other parts of the culture or a means of interaction with other groups, among other considerations. If an understanding of the interrelationships within the stone based technology and between it and the environment is useful to understanding cultural adaptation, then it may be suggested that noting change in these interrelationships may be valuable to explaining the process of adaptation. In order to accomplish such analyses, archaeologists utilize a variety of data. The usefulness of analysis is enhanced when undertaken in a systematic fashion. There is a strict need for regularity and standardization in classification: the reasons are obvious.

Among other things, archaeologists deal with artifacts. That is to say, they are concerned with classes of evidence some of which result from human behavior and are formally accepted as artifacts. This is a necessary stipulation since qualitative differences in observations form the basis of particular fields of inquiry. Consistent reporting of a set of attributes is necessary because so many different observations are possible.

For the archaeologist, analysis of relevant attributes produced by human behavior serves to define a discipline (Dunnell 1971). Objects exhibiting evidence of modification by man and deemed artifacts form one empirical basis for archaeological research. The classification of such artifacts is the attempt to render comprehensible that which sometimes appears to be otherwise. That is, it serves to organize observed data and make them potentially explainable (Dunnell 1971, Rouse 1960).

Archaeologists have traditionally classified artifacts in terms of the type taxonomy model. The use of the term type and what constitutes one has long been the subject of controversy. Cumulative anthropological knowledge, resulting in new methods and theoretical approaches, has often necessitated reformulations of the type concept, but the basic utility is generally accepted. Types may be used to indicate cultural affinity, temporal status, technological affinities and a host of other considerations of a historical, descriptive or processual interest, but their chief use has been the discussion of archaeological culture.

Archaeological cultures may be studied many ways including processually and historically. Taylor (1948:93-94) distinguished between historiography and the conjunctive approach. Ford (1954) emphasized culture historical integration as a necessary precondition to other processual studies. When Willey and Phillips (1958:57) produced a general strategy for culture historical integration in the New World, they emphasized the use of standardized terms for units of archaeological study. Integrative terms such as horizon, style and tradition were established to account for cultural manifestations in space and time. The spatial, temporal and formal content of each conceptual unit may be defined and its utility for historical study discussed.

Some archaeologists have been practicing this method for a number of years and provided useful syntheses of regional sequences as a result. Many such studies have emphasized the great range of stylistic variability found in ceramics. This is natural, since ceramics were produced plentifully in the past, are fairly resistant to destruction in the ground and are frequently found in appropriate archaeological contexts.

Deetz (1967) called pottery-making an additive process. This suggests that less variation from some cultural style may be expected, since correcting design mistakes in soft clay is relatively easier. Assessing stylistic variability has proven to be an important means of measuring relative time and space distributions (Dunnell 1978).

Stoneworking, on the other hand, involves a subtractive process (Deetz 1967). It is much more difficult to correct mistakes. A piece, once removed, cannot be replaced. It follows that a greater range of morphological variability should be expected. While this may be true, it is also true that ceramics have been in use for a much shorter period of time than have stone artifacts and we may suggest an equally important incentive to the use of rigorous classification for lithic artifacts may be established. One recent attempt to utilize the products of stoneworking in an integrative manner was the publication of the Normandy lithic typology (Faulkner and McCollough 1973). The authors related the local Normandy projectile points to the Southeast and Eastern Woodlands

using horizon style markers. Such comparison requires rigorous and scrupulous classification.

Most archaeological classification is based on a paradigmatic arrangement (Dunnell 1971). Unfortunately, failure among archaeologists to explicitly and consistently discriminate between classes, and groups, definition and description, sometimes created difficulties in independent verification or comparison between different researchers. One's goal should be to make each classification system as internally consistent as possible; created using specified criteria and with a clear statement of intent. Definitions should be presented clearly, so as to avoid ambiguous meaning. Classification should have an analytical function. To this end, three kinds of classification have been produced. Each of these has a different analytical effect.

The first classification describes lithic technologies for the central Tombigbee Valley. These analyses yield a number of inferences about the behavior involved in the different stages of artifact manufacture. These stages are presented in a sequential framework. Artifacts used in this classification are drawn from discrete archaeological contexts within the excavated sites. These contexts are assumed to represent coherent assemblages, or the handiwork of individual groups of people.

The second classification describes the use of stone tools. The selection of attributes to accurately reflect such use is the real problem. Continuous attributes such as tool edge angles or overall size and discrete attributes such as working edge morphology, wear patterns, raw materials, or overall morphology are all used to infer function.

The third classification organizes stone artifacts according to stylistic attributes to produce a set of classes. These classes may be used to form the basis of formal types. The heuristic properties of morphologically based systems of artifact classification, especially of projectile points, has been demonstrated (cf. Cambron and Hulse, 1964, 1975, Faulkner and McCollough 1973, Coe 1964, Chapman 1975, Broyles 1971, Luchterhand 1970). Morphological classification allows a means of integrating forms used over long periods of time as well as determining more chronologically restricted forms with limited geographical distribution. These types play an important role in determining cultural continuities or affinities and aid in detecting change.

As more archaeological research is conducted in a variety of local and regional contexts, the need for large-scale multi-purpose classification will undoubtedly grow with it. The traditional concern with integrating cultural manifestations over widespread segments of time and space based upon ceramic seriation, stratigraphy, and other forms of dating or correlation will continue. But one may hope that more investigations will follow the lead of Faulkner and McCollough and be equally concerned with many classes of artifacts.

CHAPTER II

THE MINERAL RESOURCE BASE

Stone based technology is dependent upon the mineral resources available to it. The resource base is the whole geographical area which is providing raw material: the local base is in the near vicinity of habitation sites and an extended base is a resource made available through some sort of exchange system. The level and kind of technology will, of course, determine the resource base necessary to sustain it. The technology will also decide whether a particular resource, even if available, is usable.

Human cultures are adaptive, in a dynamic way, to environment. That is, they have the ability to alter, invent, or otherwise accept ideas and processes which offer it a chance of success. Whether we measure such success in terms of continuity or carrying capacity or energy surpluses or any other measure, we must still be able to see how individual sub-systems sustained themselves and articulated to the cultural system as a whole.

Here we are concerned with a technology which uses a range of stoney materials to produce artifacts. Artifacts, we must assume, were of some use to the makers. We are faced with a series of such technologies ranged in time, having available the same local resource base, but utilizing that base in sometimes subtle, and often different ways and always to some useful end-product.

Before we describe these technologies and the product of these technologies, we should consider the resource base. This will determine what can be done and what can be made. That will in turn determine the success of the technological sub-system and ultimately the ability of people to efficiently exploit a piece of the earth's surface - by whatever standard that culture requires.

REGIONAL GEOGRAPHICAL CONSIDERATIONS

West central Alabama is part of the Coastal Plain physiographic province, and the Cumberland Plateau-Fall Line Hills province (Jones 1939, Copeland 1968).. Cambrian, Ordovician, and Pennsylvanian beds are found in the eastern part of the state. Large Cretaceous seas, once present in southwestern Alabama, eroded and covered these older strata. Beds of Pottsvillle sandstone and underlying dolomite formations dip to the south and are completely covered by Cretaceous and Tertiary deposits south of the Fall Line. The contact between the Paleozoic strata and the Cretaceous marine deposits is gradational in west central Alabama. A transition zone exists in many of the valleys. (Fig. 1).

Several statements may be made concerning what this meant to the prehistoric inhabitants of the central Tombigbee Valley.

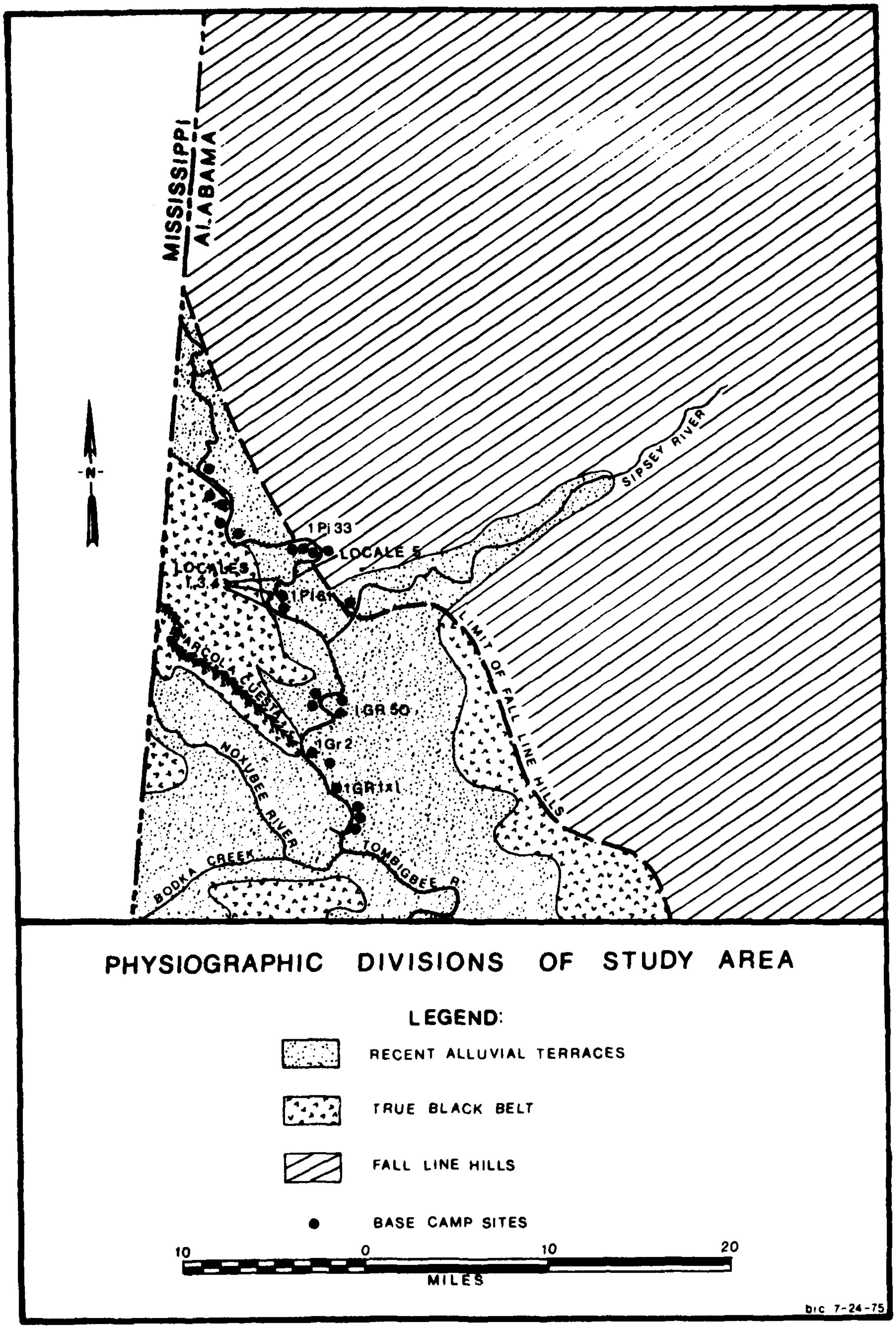

Figure 1. Contact Between Paleozoic and Cretaceous Strata in West Central Alabama.

(1) Outcrops of sandstone, shale, and other associated sedimentary rocks of Pennsylvanian or older age are limited to the Cumberland Plateau Fall Line Hills physiographic zone.

(2) The availability of conchoidal fracturing lithic material (chert, quartzite, etc.) on the local level is determined by the occurrence of redeposited Tuscaloosa gravels. Much of this gravel is derived from Paleozoic and Mesozoic formations to the north and west (Marcher and Stearns 1962:1365).

(3) The availability of nonconchoidal fracturing lithic materials on the local level is limited to the Cretaceous limestone and chalk formations and terraces derived from redeposited Cretaceous sediments within the Pleistocene and Holocene terraces.

Given these mineral resources the presence of foreign cherts within the central Tombigbee Valley is easy to determine. A greater problem lies in determining the different availability of local chert.

LOCAL GEOLOGICAL CONSIDERATIONS

The resources under consideration center on the central Tombigbee Valley from the Gainesville Lock and Dam northwestward to the Aliceville Lock and Dam where the Tombigbee River runs entrenched in Cretaceous deposits. Figure 1 locates the five archaeological sites investigated, locally available stone resources, and locales collected for the thermal reduction experiments.

A feature of the central Tombigbee Valley is the various alluvial deposits. The western side of the river contains outcrops of Mooresville chalk and Demopolis chalk, but in general recent alluvium is spread alongside the river for a distance of one mile and contains clay, sand and gravel (Wahl 1966:26). Oxbow lakes preserve many old meanders. Many sand and gravel bars are further testimony of the meander history of this mature river; one which has the effect of exposing otherwise buried deposits. The deposits are heterogeneous in any event and even though any one deposit may have been reburied and exposed frequently as a result of river action stoneworkers would never have been without access to chert gravels somewhere in their near vicinity. The only real limiting factors would have been seasonal or occasional, as in the case of heavy rainfall when gravel bars might be inundated. It is possible to conceive that people depleted some gravel bars through intensive collection, but the relative abundance should preclude consideration of any group having to go without or any one group being able to control mineral resources in the central Tombigbee Valley. We may therefore assume that all mineral resources were available to all inhabitants at most times in history. Therefore we may expect a kind of continuity in mineral availability. The various stones utilized then become a measure against which various discontinuities can be evaluated.

THE IDENTITY OF PREHISTORIC MINERAL RESOURCES

The following is a catalog of mineral resources identified in our investigations in the Gainesville Lake area. A tripartite division of (1) stone capable of conchoidal fracture, (2) other kinds of stone than that expected in a site deposit and (3) metals is made. This is, of course, not the only division possible, but it is one found useful and easily arranged.

Material with Conchoidal Fracture

The predominant siliceous stone source are the gravels of the Tombigbee floodplain. There was little difficulty in identifying and sorting out minute variation between various types of cherts within the Gainesville Lake. However, in areas where exposures are of different ages and contain a variety of siliceous materials, the problem of determining the ultimate source of the raw material becomes more difficult (cf. Penny and McCollough 1976; Faulkner and McCollough 1973; McCluskey 1978; Blakeman 1977).

Our problem included sorting out minute variation between chert types as well as the effect of prehistoric methods of chert treatment designed to enhance tool manufacture. Since there were obvious physical differences between naturally occurring chert and archaeological specimens, experiments were designed to suggest prehistoric practices concerned with thermal alteration. Thermal alteration was a likely explanation for the different colors observed between natural and archaeological specimens.

Following the experiments described later, some chert types were found to be the result of thermal alteration. Therefore, we may distinguish red jasper which is reddish in color and associated with iron ore deposits, and red chert produced by heating yellowish-brown cherts. In the past red siliceous materials found on sites in the Tombigbee drainage have been described as red jasper (cf. Nielsen and Moorehead 1972; Nielsen and Jenkins 1973; Jenkins 1975) usually without discussing any differences in the physical properties of real red jasper and material found on the site. Future investigators may wish to consider the possibility of testing for differences. The thermal alteration experiments carried out on Tuscaloosa formation derived gravels demonstrate that differences in color between chert found in natural contexts and on sites may be due to prehistoric technology (Oakley and Futato 1975; McGahey n.d.). (See Appendix II.)

The term 'chert' is used to refer to any recognizable cryptocrystalline silicate which has a splintery to conchoidal fracture, unless otherwise specified. All other forms of silicate-based materials possessing conchoidal fracture are called by their usual geological designation. Thus, quartz, quartzite, agate and chalcedony are used to describe qualities of materials as these occur in nature. 'Conchoidal fracturing' describes siliceous rocks which conveniently produce a conchoidal fracture.

The various siliceous, conchoidally fracturing materials known to have been used by prehistoric peoples of the central Tombigbee Valley are given below. These are attributed to local, nonlocal, or unknown sources. Local materials are those known to occur within 25 km of the lake. Nonlocal materials are not known to occur within 25 km of the lake. Wherever possible the geographical distribution of siliceous materials determined to be of nonlocal origin is given. The descriptions name the siliceous rock type, its origin, and whether it is thermally altered; a Munsell color designation range is given for the thermally altered chert and the parent material, since the distinction between these materials is color.

Yellowish brown chert (YC), local, 10YR4/6, 5/6 and 6/6.
A fine to coarse grained chert occurring in cobble or pebble form. These stones occur in gravel bars exposed by the Tombigbee River. The composition of the chert varies from fine to coarse grained within the same cobble or pebble and many quartz filled fissures occur. Weathered surface material ranges in thickness from less than 1 mm to a maximum of 2 mm. Size of the individual cobbles/pebbles range from around 2 mm in diameter to 100 mm or larger with the mean diameter being around 50 mm in our sample.

Dark red chert (DRC), thermally altered, local, 10R3/6, 4/6 red.
This material is derived from the yellowish brown chert which has been thermally altered. Experiments show that exposure of yellowish brown stones to heat for a period of six hours at 550°C will produce a dark red color similar to that observed on chert recovered from post-Archaic sites in the lake area. This material takes on a highly lustrous appearance upon flaking. This chert is fine grained but contains numerous fissures within the chert matrix.

Red chert (RC), thermally altered, local, 10R4/3 weak red.
This chert is also derived from yellowish-brown chert which has been thermally altered. It is coarser grained than the dark red chert and does not take on a lustrous appearance when flaked. It is more internally homogeneous than the dark red chert, and is not fissured.

Camden chert (CC), thermally altered, nonlocal.
A very light gray to tan fossiliferous chert which contains irregular patches of darker gray chalcedonic and opaline quartz. This chert is found in the northwestern portion of Mississippi in the Tuscaloosa gravels (Marcher and Stearns 1962). When thermally altered it becomes pink in color with small patches of dark gray material.

Tallahatta Quartzite (TQ), nonlocal.
A coarse grained, fossiliferous, siliceous claystone which varies in color from a white to a mottled whitish-gray-tan. This material occurs in southwestern Alabama and southwestern Mississippi (Copeland 1968; Dunning 1964). It is usually found in a weathered condition. It is distinguishable from the harder quartzites. Quarry blanks of this material are found in the central Tombigbee Valley, and quarry sites are reported from Clarke County.

Coastal Plain Agate (AG), nonlocal.
This variegated chalcedony has a mottled, banded coloring consisting

of shades of blue, purple, gray, black and pink. It occurs in thin, laminated beds of the coastal plain, particularly near Coffeeville, Alabama (Dunning 1964). The agate is encrusted with a white, calcareous cortex.

Chalcedony (Chalc), nonlocal.
This cryptocrystalline variety of quartz is translucent or semi-transparent, it has a waxlike luster. This stone is generally whitish-tan in color and probably derived from coastal plain sources.

White chert (WC), nonlocal.
White chert comes from the coastal plain of Alabama. It is coarse to fine grained in appearance. The whiteness is due to patination.

Fort Payne chert (FPC), nonlocal.
A fine grained light grayish-blue to blue-gray banded chert which occurs in the lower Mississippian formations of northern Alabama, Mississippi and various points north of the Tennessee Valley. The color and texture of chert from this formation is variable (identification is made by comparing archaeological specimens with attested samples from sources in the parent body).

Bangor chert (BC), nonlocal.
A medium grained, black gray, dark blue, or tan chert found in various places in north Alabama. Some of this chert is fossiliferous. This chert is quite difficult to identify. Its character is very variable and sometimes confused with Ft. Payne material (identification should be limited to firmly attested samples).

Orthoquartzite (Qutzite), local.
This dense, unmetamorphosed sandstone consists of granular quartz so firmly cemented by secondary silica that they fracture through rather than around the individual grains. This material occurs locally in the Tuscaloosa gravels, as well as in the Warrior drainage to the east.

Metaquartzite (Qutz), nonlocal.
This consists of metamorphosed quartz; it is formed by metamorphic recrystallization of sandstone or chert. It has been identified on several large quartzite fragments which retain traces of schistose material. It is common in the Piedmont areas in east-central Alabama.

Miscellaneous chert (Misc.), thermally altered, local.
This is not a formal grouping, but a potpourri of varying colors and textures incorporating cherts not identifiable or consonant with the other material. Most of this seems to be (YC) material in which the heat-induced color change was imperfect. Thus, many specimens in this group have a red cortex and a yellowish-brown interior with red mottling throughout the matrix. Many have a lustrous appearance.

Quartz Crystal, Nonlocal?.
Clear, colorless quartz with a crystalline structure. The source of this material is unknown.

Other Exotics (OE), origin unknown.

This group is a further potpourri ot siliceous stones whose source is unknown. Most fall within the range of variation of color or stone assigned to Fort Payne or Bangor chert (some of this stone may come from coastal plain sources).

These comprise all the siliceous stone types so far recognized in the Gainesville Lake area. Most of the debitage, flaked stone, firecracked chert, broken pebbles or cobbles were derived from one or the other of them.

Introduced Rock

Introduced rock is other lithic material found at an archaeological site. To determine whether any particular stone was brought to a site by human agency or by natural forces is feasible, but pragmatically, this is difficult and they have been combined.

Fire-Cracked and Crazed Chert, Nonlocal, local.

A cobble/pebble fragment which exhibits any one or combination of the following: crazing, or irregular, jagged cracking. These are referred to commonly as thermal spalls.

Sandstone, Nonlocal, local.

Dense material composed of cemented quartz grains. Pottsville and Hartselle sandstone occur to the north and east of the lake area. Local deposits occur and are called ironstone. It is difficult to separate the local ironstone from nonlocal sandstone. Much of the sandstone probably came from the nearby river deposits; some probably came from more distant sources.

Chalk, Local.

Soft, white to light gray, fine textured material, composed primarily of calcite. This material occurs locally as Demopolis and Selma chalk.

Conglomerate, Local, nonlocal.

Material composed of rounded to subangular fragments greater than 2 mm in diameter set in a fine grained matrix of cementing material. This stone occurs locally in terrace deposits and north of the lake area in the Tuscaloosa formation. It is reasonable to assume that the material used by the Indians came from local sources.

Breccia, Local, nonlocal.

Material composed of (greater than 2 mm in diameter) angular rock fragments in a fine matrix of cementing material. Proper breccia are cave deposits. This is a kind of conglomerate.

Hematite, Local, nonlocal.

Deep red-brown earthy material containing ferrous oxides which exhibit a characteristic mark on a scratch plate. Hematites occur in local terrace deposits and in distant iron ore formations in the Valley and Ridge Province of north central Alabama (Jones 1939). It is reasonable to assume that the Indians procured their hematite close to home.

Limonite, Local, nonlocal.
Yellow-brown hydrous ferric oxides. Limonite and hematite share descriptive characteristics as well as geographical distribution. They are often indistinguishable from each other.

Silicified Wood, Local.
Material formed by the replacement of wood by silica in such a manner that the original form and structure of the wood is preserved. This occurs in local terrace deposits.

Steatite, Nonlocal.
A compacted, fine-grained, grayish-green metamorphic rock composed of talc, but may contain other materials. This material occurs in the Hillabee schist formation of east-central Alabama (Jones 1939) and many other places in the Piedmont province of northern Georgia, including the quarries at Soapstone Ridge near Atlanta. A steatite sherd from Site 1Pi13 was tested by trace element analysis and found to conform with quarry samples from Soapstone Ridge (Luckenback, personal communication).

Manganese Nodules, Local.
Small, irregular, black to brown concretionary masses consisting of manganese salts and manganese oxide materials. They occur in the local terrace deposits.

Greenstone, Nonlocal.
A schistose metamorphic rock, greenish-gray in color due to the chlorite and epidote present. This stone is found in the Hillabee schist formation of east central Alabama (Jones 1939) and other localities within the Piedmont province.

Siltstone, Local, nonlocal.
Fine grained rock which consists of a predominance of silt sized particles.

Shale, Nonlocal.
Fine grained, laminated dark gray material, sedimentary in origin, composed primarily of silt and clay sized particles. It does not occur locally but can be found in the uplands to the north.

Limestone. Local.
A whitish sedimentary rock composed of calcium carbonate. This material occurs locally as the Arcola limestone member of the Demopolis chalk formation (Copeland 1968).

Silicified Shark Teeth, Local.
These are silicified Cretaceous period shark teeth found in the local chalk.

Silicified Bone, Local.
Material formed by replacement of bone with silica in such a manner that the original form and structure of the bone is preserved. These occur in local terrace deposits.

Silicified Oyster Shell, Local.
Material formed by replacement of shell with silica in such a manner that the original form and structure of the shell are preserved. These occur in the local chalk outcrops.

Metal

Copper (Cu).
A ductile and malleable metallic element, reddish-pink in color. It occurs in aggregates, sheets, plates, and other large masses. We have no reason to believe that this material was procured locally.

Galena (Pbs).
A bluish-gray to lead gray mineral which occurs in cubic or octahedral crystals, masses or grains. The material exhibits cubic cleavage. It is soft and heavy. We have no reason to believe that this material was procured locally.

These then are the materials utilized by American Indians in the Gainesville Lake area. It is obvious that prehistoric stone workers had a good practical knowledge of their local geological resources, and that they utilized these, as well as materials from far distance sources.

In order to utilize the far-flung mineral resources of their world they derived a variety of technological responses, which permitted them to efficiently reduce the natural cobbles to a variety of blanks and other useful flakes. We must suggest a reexchange system capable of transporting mineral resources long distances. Many of the social ramifications cannot be established on the basis of the evidence presently available. We are able to say somewhat more about prehistoric technology. The next section begins our discussion of how the Indians worked the materials just described.

CHAPTER III

STONEWORKING TECHNOLOGY

One interest of lithic analyses is the inference of behavior. This is the process involved in the actual production of the artifacts we dutifully classify. It is hoped that hypotheses with regards to technology may allow further discrimination of culture process, assisting the explanation of why artifacts vary through time or space.

Deetz (1967), Collins (1975) and Bradley (1975) suggest that lithic technology is a reductive process involving the extraction and transformation of raw material from varied geologic contexts into usable products. Because of the reductive nature of flaked stone technologies, all products of related practices utilized in reducing the material may be analyzed. Inferences based upon these analyses form the basis for constructing models of prehistoric tool manufacture. Lithic terminology used by Bradley (1975), Collins (1975), Crabtree (1972), and Tixier (1974) is used.

The intent of this section of the report is to arrive at an understanding of human behavior in terms of flaking practices. To this end, technological models designed to break down the general set of behavioral activities will be developed. This may be accomplished by inferring procedural modes (Rouse 1960). By analyzing all of the products and by-products of flaked stone tool manufacture, a reasonable model of such practices may be produced (Collins 1975).

Artifacts from Archaic, Middle and Late Woodland, and Mississippian contexts were included in the analysis. The assemblages were quantified and analyzed separately. The basic technological sequence may be expressed as a flow chart (Fig. 2). Specific lithic industries are described separately with regard to their respective cultural-historical proveniences, and used in defining local prehistoric technological traditions.

RAW MATERIAL ACQUISITION

Earlier we divided raw material sources into three arbitrary divisions, based on the geologic distribution of these materials. Local chert materials were those occurring no further than 25 km from the lake area. Nonlocal (or exotic) materials are those procured at a distance greater than 25 km. When no source of the material was known it was labeled accordingly.

Local Procurement

Acquisition depends upon availability of the resource. Since the Tuscaloosa formation-derived gravel occurs in the alluvium of the Tombigbee floodplain, one needed only to find an exposed gravel bar and pick up the desired pieces. The collection of chert gravels is an

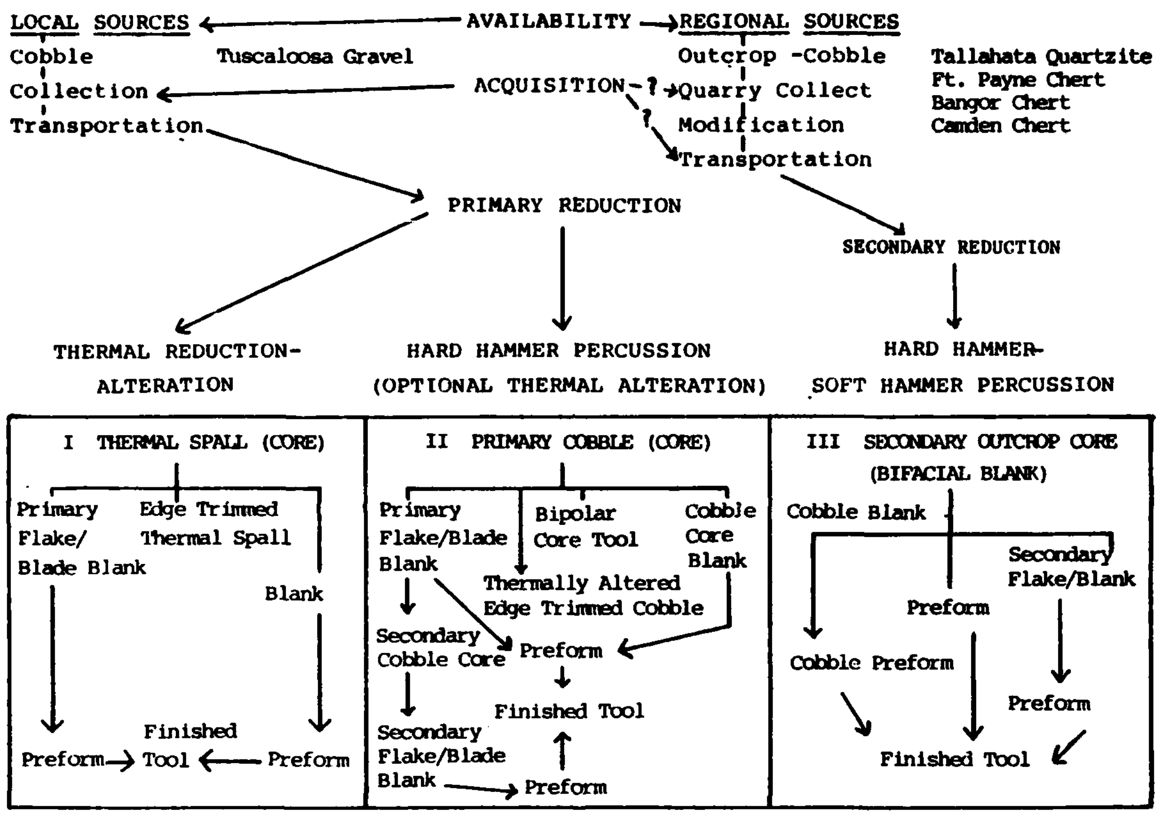

Figure 2. Flow Chart of Basic Flaked Stone Technologies During the Miller II and Miller III Phases.

expected practice, but tested by the many intact chert gravels found on archaeological sites. There is no evidence for modification of the materials at the collection site, so it is further inferred that the cobbles were transported whole and reduced at another place, which may be the habitation site.

Regional Procurement

Siliceous materials procured from distant source areas were available in both gravel deposits and outcrops. Tallahatta Quartzite, Ft. Payne chert, Bangor chert and Camden chert occur in areas at distances greater than 25 km. Acquisition of these materials would be more costly in terms of time and effort. If the raw materials were procured from the Tallahatta, Bangor and Ft. Payne outcrops, quarrying may be considered another mode of procuring essential siliceous materials. It could be accomplished several ways: by the local folk themselves, along a network of local kin groups, or some other trade network. The operation of the exchange network may be necessary to the long distance acquisition pro cess.

Having obtained the raw material, it must be transported, either unmodified, or partially reduced. Initial reduction may involve thermal alteration, or reduction into a form suitable for long distance transportation.

Tallahatta Quartzite is an extensively bedded material which occurs in thick outcrops. When fresh, this material possesses good conchoidal quality. Quarries are associated with Middle to Late Archaic and Middle Woodland components from southwestern Alabama near Butler. The reduction technology at the quarry may be reconstructed. This model for the procurement of this stone should be the basis of testable hypotheses used in future investigations.

Large pieces of Tallahatta Quartzite were quarried, quartered, and trimmed to produce prepared cores. Large thick blades were removed from these cores, resulting in roughly parallel margined to triangular blades with several ridges on the dorsal surface. The striking platforms remain on these blades. The blades were then flaked to produce regular, symmetrical bifacial preforms and blanks (secondary cores). The preforms were then reduced to produce the finished tools.

Blanks, preforms and finished tools would be introduced into the exchange system, whatever form that might take, and brought to the Gainesville Lake area to be further reduced, exchanged, or used. Further reduction of the large quarry blanks (bifacial cores) would involve the production of secondary flake blanks for further reduction into finished tools or reducing the entire blank into the finished product.

Nonlocal Tuscaloosa gravels were also procured, especially large nodules of the Camden variety. The low proportion of heated flakes to non-heated flakes in Archaic strata coupled with the high proportion of thermally altered projectile points suggests that projectile points were manufactured at special localities. Futato (1977) as well as DeJarnette, Walthall and Wimberly (1975b) have noted a distinct Archaic reduction

sequence concerned with biface manufacture in the Cedar Creek and Buttahatchee watersheds to the north. In this sequence, cobbles are bifacially flaked into preforms and then heated. Further reduction produces finished flaked tool forms. Initial biface reduction and/or thermal alteration may take place at some distance from the ultimate deposition of the tools. Preforms could be finished or transported as preforms. Such a sequence would involve collecting as the first step in procurement, reduction into preform state, thermal alteration and secondary reduction into a finished tool and/or transportation to the Gainesville Lake area.

We may suggest two means of procuring regional siliceous stone, each technologically distinct. The South Alabama reduction process involves a core and blade industry with an emphasis on producing large bifacial blanks for transport. The North Alabama reduction sequence is less understood with reference to the Bangor and Ft. Payne cherts, although a similar scheme is expected. However, the procurement and reduction of Tuscaloosa formation gravels (especially Camden chert) evidently involved a system for producing preforms, thermally altered and reduced into projectile points and other tools (Futato 1980, DeJarnette et al. 1975b).

REDUCTION SEQUENCES

Regardless of the initial steps in acquiring the siliceous materials, once they arrived at the camp or other habitation site in the lake area, three distinct methods may be deduced for the further reduction of the material. These include: (I) Thermal reduction of local chert cobbles; (II) Primary hard hammer reduction (with optional thermal alteration) of local cobble materials; (III) Secondary hard hammer/soft hammer reduction of nonlocal materials. These three practices are not identified with any particular culture or historical period. The predominant use of any one of these practices may relate to social and physical factors in the environment.

Thermal Reduction/Alteration

Local gravels, having been collected, could be heated causing them to split. Using fire to reduce chert cobbles has been noted before (Gregg and Grybush 1976:190, Crabtree and Butler 1964:2, Purdy 1975, Mandeville 1973:171, House and Smith 1975). Severe damage occurs to siliceous materials when subjected to temperature in excess of 600° C. How fast the temperature is raised will have an effect on the amount and degree of thermal damage (Purdy 1975).

Inferences of the thermal alteration process were tested by experiment (See Appendix 2). The evidence of the sites suggested that heating procedures took place within the Middle and Late Woodland contexts of the Gainesville Lake area. Whether the heating was intentional or not was difficult to determine. The reason for the thermal alteration, that is, increased flaking quality, reduction, sharper cutting edges, elimination of structural flaws, if the thermal alteration was intentional, was a further subject of curiosity.

Small depressions containing fire-cracked and crazed chert found at Site 1Pi33 (Coblentz, Personal Communication) suggest how the stone was heated. The lack of evidence of domestic activities suggests that the stone was purposefully heated. That most of the Miller II and Miller III debitage was heat treated may add credence to this.

Assessing the reasons for thermal reduction/alteration is more difficult. Anderson (1979:7) notes that it tends to be associated with advanced stages in tool manufacture, soft as opposed to hard hammer flaking, biface manufacture, and fine workmanship (primarily pressure flaking). He states (1979:8) that thermal alteration may occur for one or more of the following reasons: (1) Accident, (2) Specific appearance, (3) Improved quality, (4) Sharp cutting edges, (5) Soft hammer or pressure flaking efficiency or (6) Raw material conservation.

Accident, an unintentional event, is obviously of no use in interpreting reasons. To the other five reasons mentioned by Anderson we may add one more possibility. Gregg and Grybush (1976) demonstrated ethnographically that people practiced thermal reduction on small cobbles and pebbles: that is, thermal alteration and chert reduction occurred simultaneously. Although Purdy (1975:40-41) and Anderson (1979) indicate that a slow temperature rise is needed to thermally alter chert into a usable form, our experiments suggest that heat treatment may occur as a by-product of thermal reduction practices. Depending upon the chemical and physical structure of the chert, quick, intense heat will result in shattered heat spalls suitable for further modification into tool forms.

Texture, appearance and physical properties of the stone change with heating. Heat treatment causes fine grained cobbles containing internal quartz-filled fissures to explode, turn a deep red, and produce glossy flake scars. Coarse materials were less subject to explosion and contained fewer internal fissures. Generally, the fine grained material would shatter along these fissures upon heat application above 550°C. Knapping experiments suggest that unaltered cobble material is extremely difficult to reduce.

Intentional reduction by heat application would have several advantages. These would include: (1) providing an easy method of reducing cobbles; (2) reducing the tensile strength to make secondary reduction easier; (3) producing sharper edges on flakes, (4) eliminating internal flaws and (5) creating striking platforms on thermally fractured surfaces. It seems that intentional thermal reduction had a number of advantages in the production of tools.

Thermal alteration of the material increased its quality, especially for pressure flaking. It may permit fine pressure retouching. Sharper cutting edges are possible due to the glass-like nature of the heat altered stone. Appearance is impossible to infer archaeologically. Raw material conservation may have been of little importance to these people who had large quantities of lithic resources readily available. Improved flaking quality and easy initial reduction would have been advantages to prehistoric knappers.

Secondary reduction practices follow reduction into thermal spalls. Reduction in point size between Miller II and Miller III could be related

to a reduction in the size of flake used. This could have a obvious correlation. Testing this hypothesis could produce evidence that smaller flakes were being used, suggesting thermal reduction.

To test for significantly different flake size all secondary decortication flakes of dark red chert were sifted successively through three different screens: a one-inch mesh, a one-half-inch mesh, and a one-quarter-inch mesh. The pieces retained in each screen were examined. The samples were selected from Miller II and Miller III proveniences at sites 1Gr1X1, 1Gr2, and 1Pi61. The frequency of different flake sizes by cultural provenience was determined. A chi-square test of association was utilized in the attempt to determine any significance to the flake size associated with the different proveniences.

A null hypothesis for the independence of the variables may take the following form:

> H_o - There exists no significant difference in the size of secondary decortication flakes from Miller II and Miller III proveniences at Sites 1Gr1X1, 1Gr2 and 1Pi61.

The following results were obtained:

1Gr1X1

		Cultural Attribution		
		M-II	M-III	
Flake	1" - ½"	21	24	45
Size	½" - ¼"	144	410	554
		165	434	599

$x^2 = 8.91$ $p = .05$, d.f. = 1

1Gr2

		Cultural Attribution		
		M-II	M-III	
Flake	1" - ½"	32	9	41
Size	½" - ¼"	110	201	311
		142	210	352

$x^2 = 27.41$ $p = .05$, d.f. = 1

1Pi61

		Cultural Attribution		
		M-II	M-III	
Flake	1" - ½"	165	28	193
Size	½" - ¼"	849	455	1304
		1014	483	1497

$x^2 = 31.96$ $p = .05$, d.f. = 1

These tests suggest a probability of significant difference in the size of secondary decortication in flakes in the two phases.

Such a reduction in flake size could indicate the selection of techniques capable of producing small secondary flakes. Given the substantially smaller size of Miller III projectile points when compared to those of Miller II, such a decrease in flake size is not unexpected. Our analysis suggests the obvious, that small artifacts require small flakes. The easiest way to produce these was thermal reduction. The use of thermal spalls for the manufacture of small points could account for the decrease in flake size. Alternately, the use of smaller cobbles would have produced a concurrent decrease in size of the finished products.

Whatever the case, Miller III lithic technology differed from that of Miller II. Thermal alteration occurs on over 80 percent of the Miller II lithic materials and over 90 percent of the Miller III lithic material. Thermal reduction was a useful technique of cobble reduction during Miller III. This practice may go back to the Miller I phase, but it came into its own late in the Woodland period and into the Mississippian.

Primary Hard Hammer Reduction-Optional Thermal Alteration

This mode of reduction of local cobbles involves (optional) thermal alteration prior to reduction. The temperatures used were less than those which caused fracture or damage. Assuming a fire basin with the fire built above the rocks, then rocks closest to the heat source would have exploded. Those deeper and insulated by the other stones would be less likely to suffer damage. This is pure conjecture, but it would explain why two distinct heat treatment effects occur in association.

At any rate, the insulated cobbles would remain intact, but would be thermally altered. These could be reduced bifacially, and a sharp bifacial-unifacial edge could be quickly created. Much of the flaked tool assemblage associated with Miller II and Miller III proveniences is based upon such material and consists of bifacially flaked edge trimmed cobbles. Although hard hammer flaking was predominant in reducing the heated cobbles, soft hammer and pressure flaking were also used.

In this sequence percussion flaking of the thermally altered cobble produces either a core tool (edge trimmed cobble), a flake blade blank, a cobble core blank or a preform. Many heated cobbles used as cobble cores have had primary flake blade blanks removed. The blanks were used as they were or further reduced into unifacial and bifacial implements. Sometimes the original cobble would be split into two or more secondary cobble cores. These could be used as a source of flake blade blanks, which would also be used as they were or further reduced.

The heated cobble could be reduced into cobble core blanks, preforms, and finished tools. This was the method used by many Archaic and Middle Woodland peoples to produce projectile points.

The second procedure reduced unheated cobbles using bipolar percussion. In these cases, the cobble was placed on a hard anvil and struck with a hammerstone. Although both flake and core tools were produced by this technique, this method is best to produce cobble core tools. Unaltered cobbles were seldom used. These products of hard hammer and anvil

percussion flaking are called bipolar core tools. This technique was used throughout the Archaic stage, but very little after the advent of Northern Tradition ceramic producing cultures.

Secondary Hard Hammer-Soft Hammer Percussion

This practice is associated with siliceous stone from the Tallahatta formation. After quarrying and modification, the material was transported to the Gainesville Lake area in secondary core form. Whether as large bifacial cores (blanks) or prepared pyramidal cores, it was reduced by two methods: the core could be reduced to produce core preforms and finished flaked tools, or made into secondary flake blanks which could be reduced into preforms and finished flake tools. This system would produce projectile points and specialized flake tools. Bifacial thinning and retouch flakes from artifacts of Tallahatta Quartzite are frequently encountered in Woodland and Archaic levels.

Summary of Reduction Sequences in the Gainesville Lake Area

Reduction Sequence I, This sequence involves the use of intentional thermal reduction/alteration. It was confined to the Woodland (Miller) and Mississippian (Moundville) components. Specifically, thermal reduction was practiced during the Late Miller II Turkey Paw subphase, the Miller III Vienna subphase, the Miller III Cofferdam subphase, the Miller III Catfish Bend subphase, the Terminal Woodland-Early Mississippian Gainesville subphase, and the Mississippian Moundville I, II and III subphases.

Reduction Sequence II, This sequence involves the use of hard hammer percussion with or without thermal alteration. It was used throughout the sequence. Heat was used during the Woodland and Mississippian stages and bipolar flaking during the Archaic. Both Archaic and Woodland groups thermally altered cobbles and bifacially flaked them into projectile points.

Reduction Sequence III, This sequence is associated with Tallahatta Quartzite, its procurement, transportation and secondary reduction. This sequence is associated with the Archaic stage, but Middle Woodland groups (Miller I and Miller II) also utilized it.

BIPOLAR REDUCTION IN THE CENTRAL TOMBIGBEE VALLEY

The recognition of chert knapping procedures has been useful to the interpretation of local lithic sequences establishing the practicality of various resources, technological variation in the use of local chert sources, the knapping techniques utilized and changes in these techniques.

Bipolar reduction is one procedure used for breaking small cobbles: it incorporates a hammer and an anvil. The cobble (or core) is placed upon a firmly set anvil and struck by the hammer. The effect is the massive insertion of force by the hammer which causes a flake to be removed. Reactive energy is also inserted at the base of the core as it is driven down against the anvil. This technique is often difficult to

recognize, but bipolar assemblages have characteristic features. We can recognize the use of this technique by Archaic stage people in the Gainesville Lake area.

The bipolar tools recovered from these Archaic contexts consist of cores and core tools -- wedges, scrapers, adzes, gouges, and the like. Some shapes, such as opposing point and ridge point cores, seem to represent stages in core reduction. Other classes, such as opposing ridge and ridge area cores, may represent stages in core reduction, but the presence of concave battered platforms also suggests their use as some kind of tool. The multiple direction/uniface cobbles with right-angled ridges seem to be multi-purpose chopping, scraping, planing tools as well as flake sources.

Bipolar flaking was not the only technique employed during the Archaic stage, but it was widespread in the lake area and used over a long time. It is, nevertheless, an Archaic technological process which does not appear in other nearby areas. The practice of bipolar flaking of local chert sources in the central Tombigbee may be characterized as follows:

1. A general wedge-rectangular shaped core with opposing crushed platforms from which sheared force cones originate: often producing multifaceted cleavage faces.

2. Force wave scars in the form of concentric rippled flake blade removals running the major length of the core from opposing platforms.

3. Opposing battered ridges, points, or areas serving as platforms or bases and possessing hinge or step fractures below or above the battered platforms or bases.

Bipolar Core and Core Tool Classification

Archaic cores and core tools from the Gainesville Lake area possess these characteristics. To confirm the practice a number of specimens from four sites (1GrlX1, 1Gr2, 1Gr50 and 1Pi61) were drawn from discrete proveniences. These artifacts were analyzed using a classifactory system first suggested by Binford and Quimby (1972: 358-361). In this classification combinations of morphological attributes (noted in the definitions) form the sorting criteria. No use distinctions are intended; that is, separating cores from core tools is not considered. Reference to the differing uses of these tools will be made later.

Class 1--Ridge-Area N=11.

These specimens exhibit a continuous battered ridge on one end which serves as the platform and an opposing area formed by either natural cortex or a transverse fracture. Numerous hinge fractures occur 1 mm to 2 mm below the battered platform ridge. The opposing area is characterized by short step flakes and edge crushing when not covered by cortex.

Four examples are flaked on one core face only; the opposite side is covered by either cortex or a fracture plane. Seven examples have flake blade removals running down opposing core faces resulting in a multi-

faceted appearance. Two examples exhibit concave platforms when viewed transversely. This particular platform configuration is caused by removing more flakes from the middle areas than from the lateral margins. These specimens were formed by repeated percussion blows. This produces a uniformly crushed platform ridge and a base which is occasionally crushed as a result of force waves reflected from the anvil (Figs. 3, 5).

Class 2--Ridge-Point N=8.

This class has a battered ridge in opposition to the battered point. Numerous hinge and step fractures occur just below the battered platform. The opposing end has a pointed configuration produced by the intersection of sheared force cones or flake-blade scars which originate at the point. The point is crushed on three examples. Many step fractures result from contact with the anvil. The pyramidal form of some artifacts appears to be a result of percussion blows shearing the cone and producing the battered ridge opposite the point. Four examples retain cortex on one surface and the other four are faceted, possessing flake-blade removals along all portions of the core margins (Figs. 3, 6).

Class 3--Opposing Ridge N=3.

Class 3 exhibits the presence of opposing battered ridge platforms. Heavy crushing, step flaking, and many hinge fractures occur along these platforms.

Two examples seem to be exhausted cores while the third has flake-blade removals along the whole of one face. This artifact has very concave platform ridges (Figs. 3, 5).

Class 4--Opposing Point N=2.

These artifacts seem to be exhausted cores. Many percussion blows have reduced the original core to a burin-like spall form with sheared force cones terminating at sharp points. Concentric ripple marks are present on two or more of the facets suggesting that these are residual nuclei from the bipolar reduction technique. Crushing and step flaking occur on the opposing points (Figs. 4-5).

Class 5--Point-Area N=2.

Class 5 artifacts exhibit a single crushed point opposed by an area formed by transverse fracture. Long flake-blade removal scars originate from the point and extend the length of the core. One example seems to be sheared from a larger core producing a crushed pointed platform. The other is a complete core with one face completely faceted by sheared force cones (Figs. 4-5).

Class 6--Multiple Direction Right-Angle Uniface Cobble N=13.

These unifacially flaked artifacts have been repeatedly turned and battered from two or more directions. This results in opposing ridges (platforms) and battered platforms at right angles to one another. Flake blade removals originating from the opposed and right-angled platforms intersect and produce complete decortication of one face. Heavy step flaking and numerous hinge fractures occur just below the battered platforms as well as above areas used as bases. These are similar to the opposing ridge and ridge-area forms except that they have been repeatedly turned on the anvil in an effort to decorticate one face while leaving the other surface intact: the decortication process takes place exclusively unifacially (Figs. 4,6).

Class 7--Pseudo-Burin Spalls N=3.

These pieces represent by-products of the bipolar knapping technique. These small multi-faceted spalls were removed from the margins of bipolar cores during the reduction process. All examples retain portions of the crushed platforms (Fig. 4).

General Discussion

This technique occurs in areas where the mean diameter of material is somewhat less than 5 cm. It seems to be an efficient technique for reducing such small chert pieces. The technique may serve as a behavioral alternative to seeking more tractable stone. To this extent it may be considered as the positive adaptation of a stone technology to an area where much of the raw stone occurs as small chert pebbles.

In a region where small sized lithic sources occur, such as the Gainesville Lake area, we must consider technological alternatives available to the indigenous stoneworkers. Bipolar flaking could play a crucial role in the production of lithic assemblages for these peoples. The archaeologist's problem is to determine the frequency of the bipolar technique and the place for bipolar technique in a multi-stage reducing sequence.

In the Gainesville Lake area sequence there is evidence for ascribing a flake technology contemporary with a bipolar technology during the early Archaic. For the rest of the Archaic the data are scant but seem to indicate that specialized flake tools were less frequent. Bipolar technique is apparently associated with the whole of the Archaic stage in the Gainesville Lake area.

Many investigators associate this technique with small nodular chert materials (MacDonald 1968, Chapman 1975). Gillespie (1977:88) even suggested that the most important reason for adopting the technique was the size of the cobble or nodule rather than the quality of the stone. Geology imposed limits upon technology. Bipolar flaking seems to be a technique allowing maximum utilization of stone; and making possible the use of the small materials found in the Gainesville Lake area. Small cobbles are readily found there and the bipolar technique made possible their utilization. Since specialized tools, such as projectile points and unifacial flake tools, are often made from nonlocal or thermally altered stone, it is suggested that any conservation measure, such as bipolar flaking, would reduce the need to obtain lithic materials from distant sources.

Use of Bipolar Produced Tools

It is difficult to estimate function of prehistoric tools. The following classification uses morphological and technological criteria in inferring function from inspection of the working edge and general appearance of the tool.

Splintered Wedges (Figs. 3-4).

Some cores have concave acute surfaces useful as wedges (see Table 1). Use attributes could not be distinguished from manufacture attributes; therefore, only the shape permits our tenuous conclusion.

Multiple Direction Right-Angle Uniface Cobble (Figs. 5-6).

These could be cores utilized for cleaving, chopping, and heavy duty scraping. Wear patterns were not discernible, but these seem to be cores worked into scraper-planing tools. They may have transverse working edges, but we were unable to determine this. The edge angles were erased during manufacture, but the angles for the transverse bits on these tools were somewhere between 50° and 75°, a range suitable for planing and scraping.

Some Related Archaic Stage Tools

Seven categories of flaked stone tools from Archaic assemblages were recognized as something other than bipolar produced cores, wedges or scraper planes. These were produced by a variety of knapping technologies, but without anvil support. These assemblages are unifacial with only a single adze and hafted end scraper exhibiting bifacial retouch. These include: (1) Uniface and biface hafted end scraper, (2) Uniface flake scraper, (3) Uniface cobble scraper, (4) Uniface and biface adze, (5) Uniface wedge-chisel, (6) Uniface gouge-wedge, and (7) Biface cobble scraper-knife.

Twenty-five tools attributed to these categories were examined for traces of use with a Bausch and Lomb stereoscopic microscope with zoom magnification of 10x-70x. Use attributes were recorded for the entire tool, but emphasis was placed on traces of wear present on transverse working edges. Ahler's (1971) list of use wear definitions were used. They consist of (1) Edge rounding, (2) Edge faceting, (3) Edge smoothing, (4) Edge polishing, (5) Edge blunting, (6) Edge crushing, (7) Edge striations, (8) Edge grinding, (9) Step flaking, (10) Surface scratching, (11) Surface rounding, (12) Surface smoothing, (13) Surface polishing, (14) Surface grinding, and (15) Surface striations.

It should not be expected that Ahler's system was usable in all cases, so it was applied in a broad, general manner in the following discussion. Table 2 summarizes the provenience of these tools; Table 3 summarizes the use wear attributes.

Hafted End Scraper N=6, Mean Edge Angle = 71° (Figs. 7-8).

These tools have wear which includes edge rounding, smoothing, and polishing on the transverse working edge as well as some surface smoothing and polishing above the working edge. Edge striations perpendicular to the working edges occur on two examples. Insignificant edge crushing, step flaking, and blunting are present on some. The wear was confined to the dorsal flaked surface; the ventral surface was free of wear. The wear pattern and the tool's shape suggests hafting as a scraper.

Uniface Flake Scraper N=2, Mean Edge Angle = 67° (Fig. 8).

These resemble the hafted end scrapers but there is no clear evidence

for hafting. The wear resembles that on the hafted end scrapers, suggesting similar use.

Uniface Adze N=3, Mean Edge Angle = 59° (Figs. 9-10).
Wear on these three examples includes edge rounding, smoothing, blunting and crushing. Minor step flaking and surface polish occur on two examples. The wear suggests use as a plane.

Biface Adze N=1, Mean Edge Angle = 61° (Figs. 7, 9).
This was bifacially flaked and evidently hafted. The transverse bit was resharpened. Wear occurs on the bit edge and ventral surface. Wear included edge rounding and polishing as well as step flaking, surface scratching, striations, rounding and polish. The wear suggests use in chipping and planing wood.

Uniface Chisel-Wedge N=4, Mean Edge Angle = 46° (Figs. 9-10).
These tools are described elsewhere as category gouge-chisel-wedges. Here the general category is divided into two sub-categories based on morphological attributes such as edge angle, thickness, and bit form. Microscopic wear on the bits includes edge rounding, faceting, smoothing, polishing, blunting, and step flaking. Step flaking is the most frequent form of wear (three specimens). Morphology and wear suggests that the tools were used on hard substances.

Uniface Gouge-Wedge N=5, Mean Edge Angle = 58° (Figs. 9, 10).
The bits on these examples are generally longer, thicker and more narrow than on the chisel-wedges. The edge is steeper and the shape and thickness differs from the preceding category of chisel-wedges. Microscopic wear includes edge rounding, edge polishing, smoothing, blunting, crushing, step flaking and surface scratching. These may indicate contact between the bit and a material such as wood or bone.

Uniface Cobble Scraper N=3, Mean Edge Angle = 60° (Figs. 8, 10).
Wear includes edge rounding and polish on one example, suggesting use on soft materials.

Biface Knife-Scraper N=1, Mean Edge Angle = 55° (Figs. 7-8).
Slight edge rounding was the only observable trace of wear. This suggests scraping or a light cutting use for the tool.

Given the technological means to utilize the resources available, the Indians were capable of producing a variety of artifacts. The most frequently discovered class of artifacts was projectile points. The importance of this class of artifact to the Indians of the area should be unquestioned.

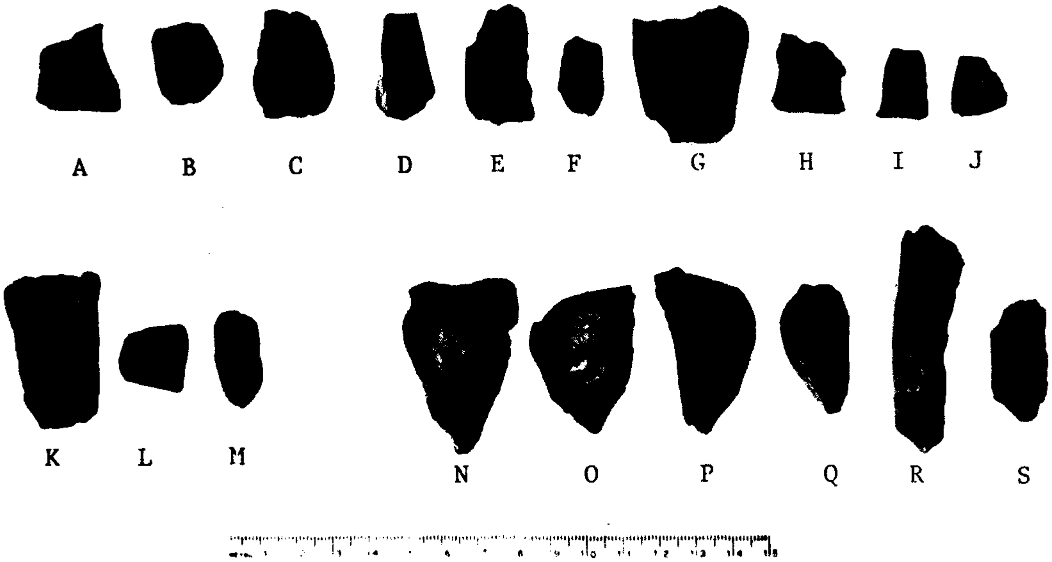

Figure 3. Bipolar Lithics from Archaic Strata. Ridge Area Cores, A-D (Site 1Gr50), E-G (Site 1Gr1x1), H (Site 1Gr2), I-J (Site 1Pi61); Opposing Ridge Cores, K-L (Site 1Gr50), M (Site 1Gr2); Ridge Point Cores, N-P (Site 1Gr50), Q-S (Site 1Gr2).

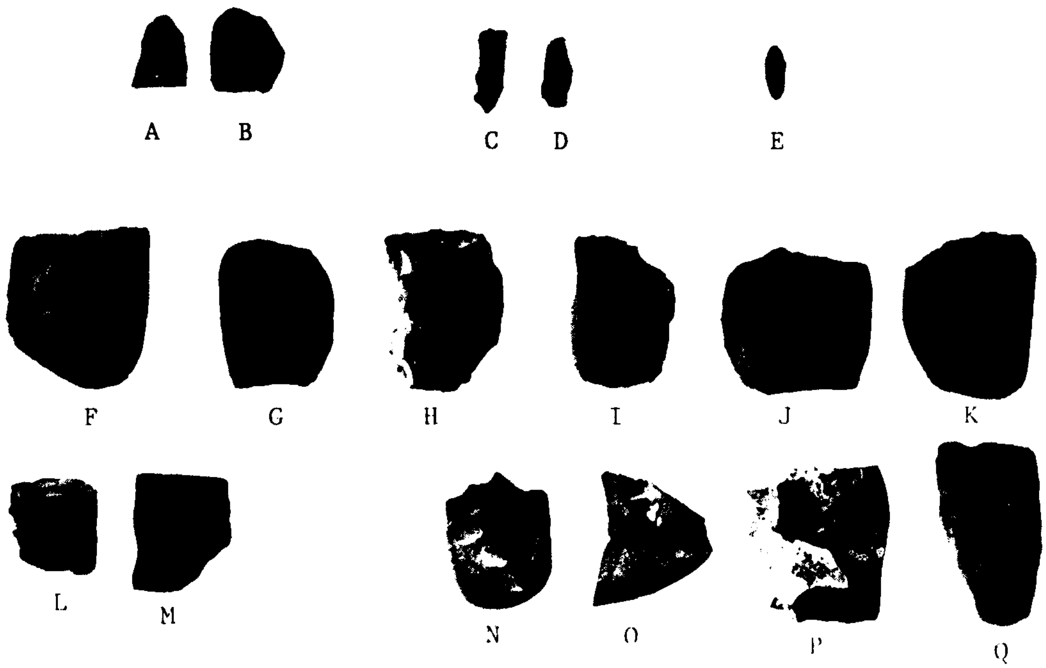

Figure 4. Bipolar Lithics from Archaic Strata. Point Area Cores, A-B (Site 1Gr50); Opposing Point Cores, C (Site 1Gr50), D (Site 1Gr1x1); Pseudo Burin Spall, E (Site 1Gr1x1); Multiple Direction Right Angle Uniface Cobbles, Scraper Planes, F-J (Site 1Gr2), K-M (Site 1Gr1x1);Multiple Direction Right Angle Uniface Cobbles, Heavy Duty, Choppers/Scrapers, N (Site 1Gr50), O-Q (Site 1Gr2).

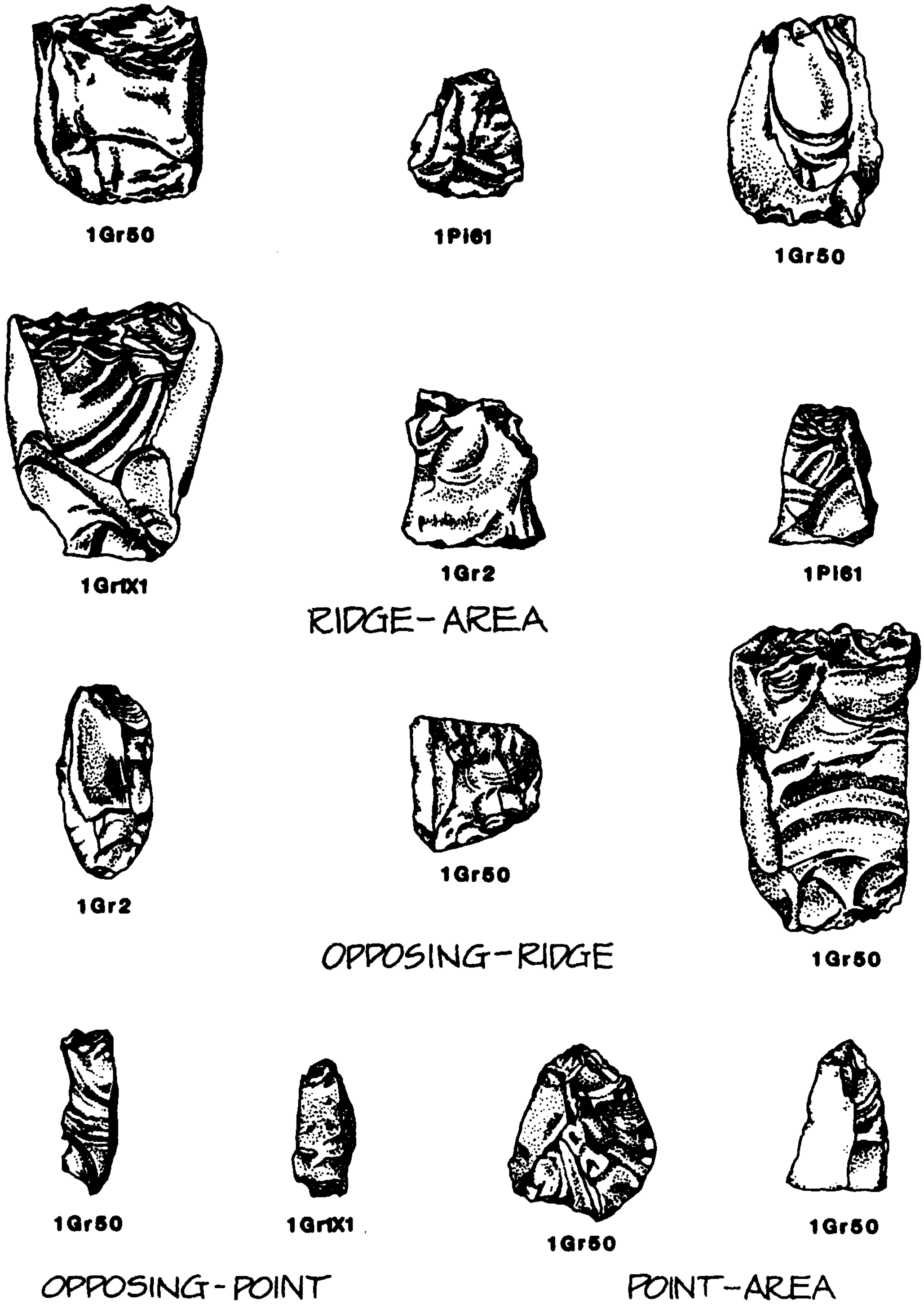

Figure 5. Bipolar Lithics from Archaic Strata. Ridge Area, Opposing Ridge, Opposing Point and Point Area Bipolar Cores, Splintered Wedges.

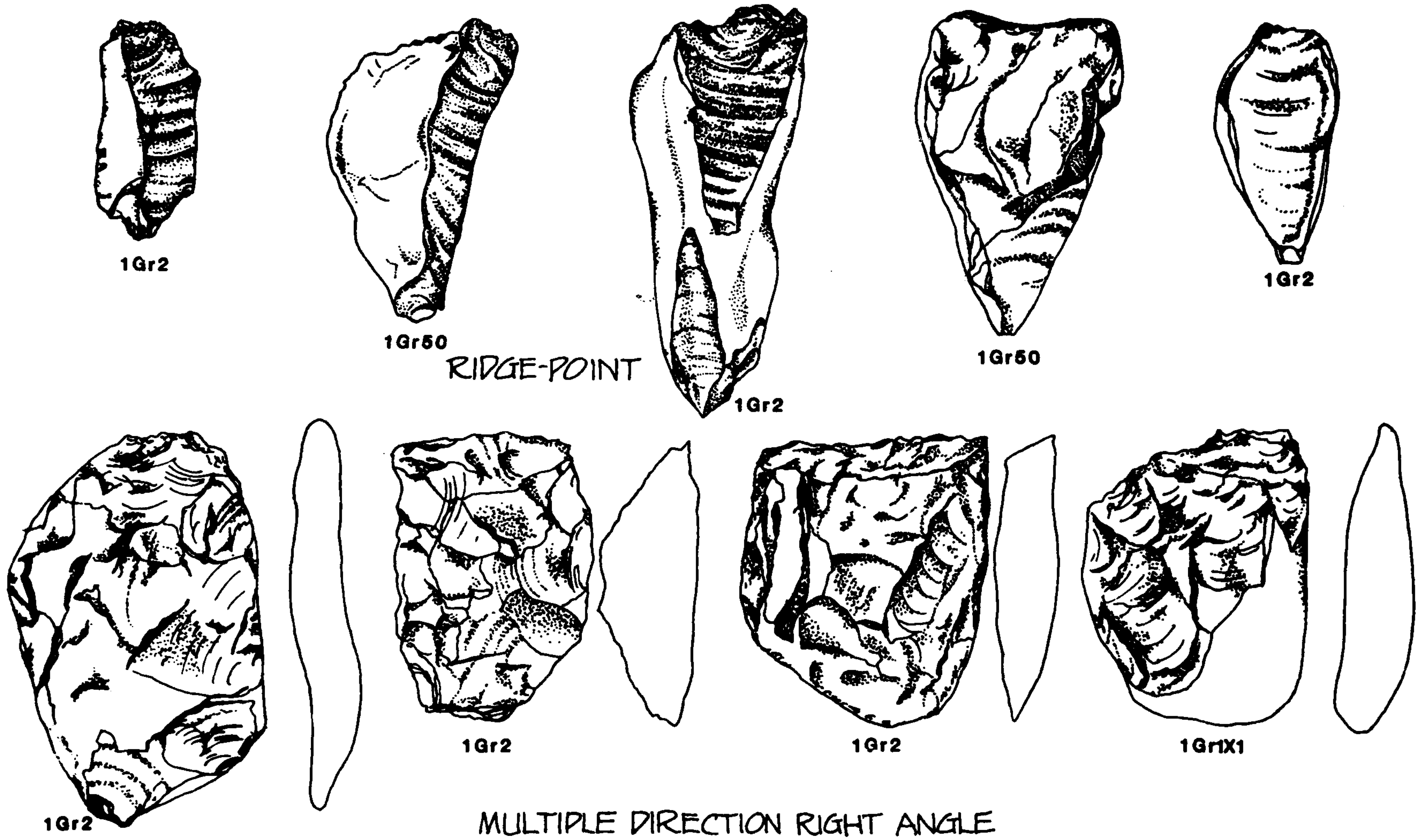

Figure 6. Bipolar Lithics from Archaic Strata. Ridge Point Cores and Multiple Direction Right Angle Uniface Cobbles.

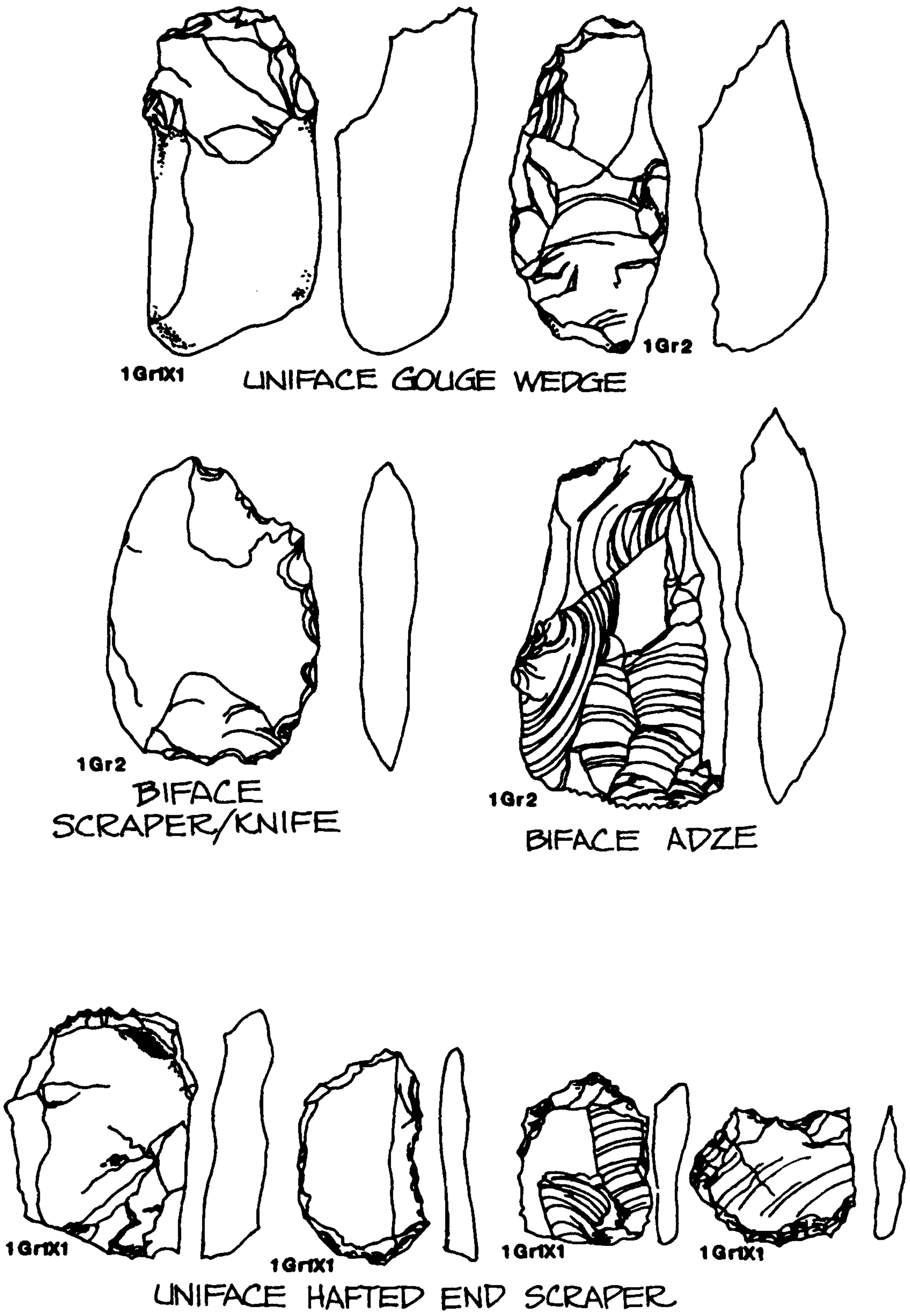

Figure 7. Uniface and Biface Tools from Archaic Strata. Uniface Gouge/Wedges, Biface Scraper/Knife, Biface Adze, Uniface Hafted End Scrapers.

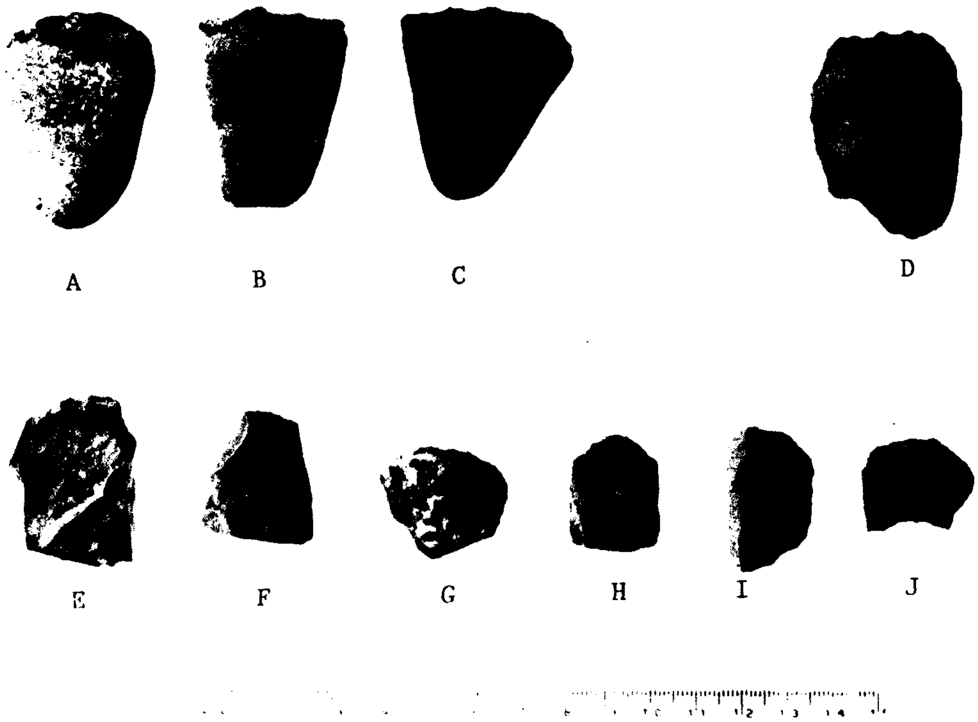

Figure 8. Uniface and Biface Tools from Archaic Strata. Uniface Cobble Scrapers, A-B (Site 1Gr2), C (Site 1Gr1x1); Biface Knife/Scraper, D (Site 1Gr2); Uniface Flake Scrapers, E-G, (Site 1Gr1x1); Uniface Hafted End Scrapers, H-J (Site 1Gr1x1).

Figure 9. Uniface Tools from Archaic Strata. Uniface Adzes, A-B (Site 1Gr2), C (Site 1Gr1x1); Uniface Wedge-Chisels, D-E (Site 1Gr1x1), F-G (Site 1Gr2); Uniface Gouge-Wedges, H (Site 1Gr1x1), I-L (Site 1Gr2); Biface Adze, M (Site 1Gr2).

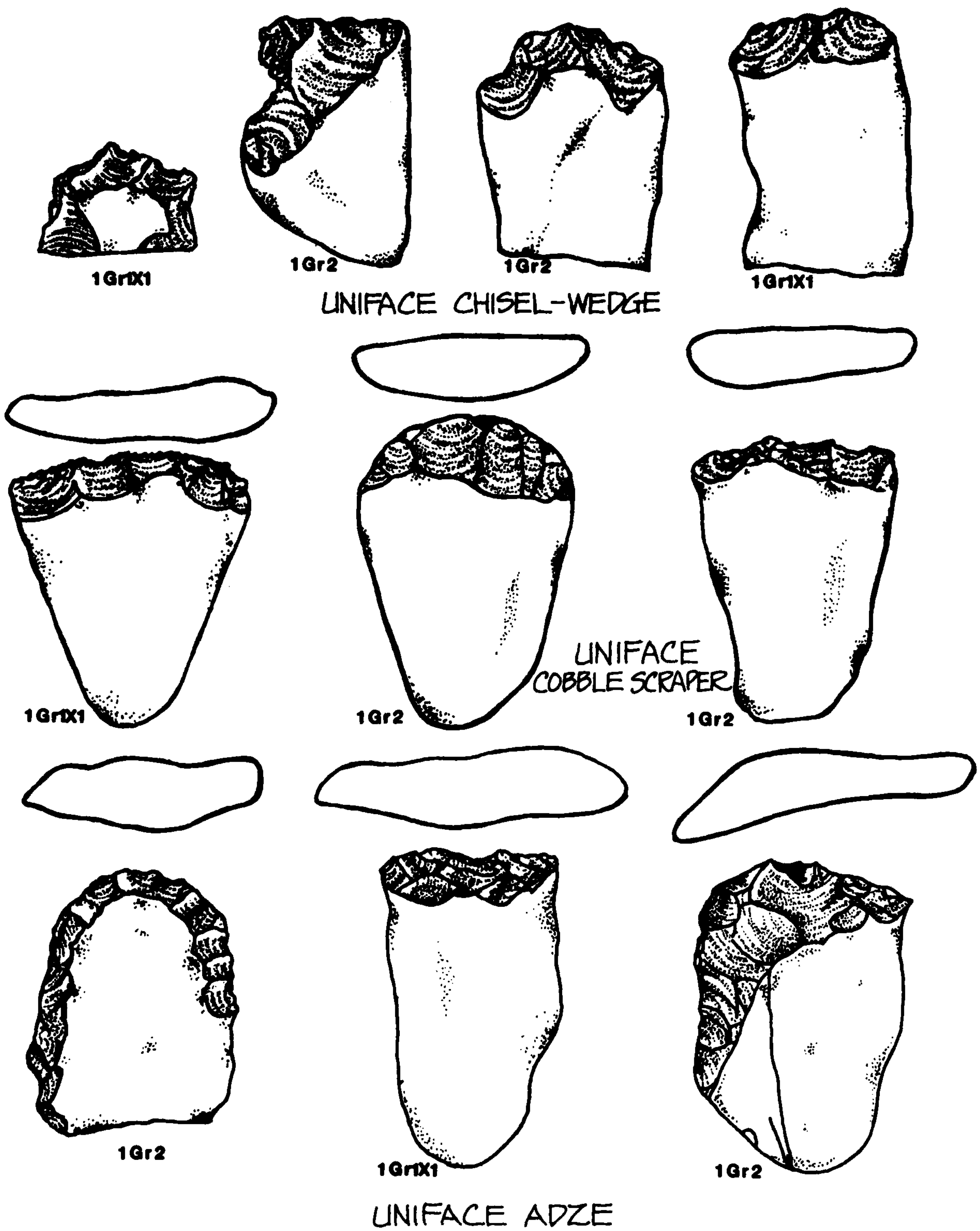

Figure 10. Uniface Tools from Archaic Strata. Uniface Chisel-Wedges, Uniface Cobble Scrapers, Uniface Adzes.

Table 1. Sites 1Gr2, 1Gr1x1, 1Gr50, 1Pi61 Bipolar Cores, Splintered Wedges, Scraper Planes.

Measurements in Millimeters

Site	Cat. No.	Provenience	Class	Length	Width	Thickness	Raw Material	Use
1Gr1x1	118-9	460N R500 Level 5	R-A	39.2	32.8	11.7	YC	Flake Source Splintered Wedge
1Gr1x1	138-2	500N R600 Level 5	R-A	28.2	24.1	10.0	YC	Flake Source
1Gr1x1	132-1	440N R550 Level 5	R-A	18.0	34.5	10.2	Misc.	Flake Source Splintered Wedge
1Gr1x1	118-17	460N R500 Level 5	R-A	23.4	13.1	8.2	YC	Flake Source
1Gr2	243-11	550N 320E Level 5	R-A	22.7	20.8	9.8	YC	Flake Source
1Gr50	46-4	355R5 Level 4	R-A	32.1	23.0	6.8	YC	Flake Source Splintered Wedge
1Gr50	68-2	445L25 Level 5	R-A	23.9	19.6	13.6	YC	Flake Source
1Gr50	32-1	290L40 Level 4	R-A	24.7	25.7	9.0	RC	Flake Source Splintered Wedge
1Gr50	78-1	110L40 Level 6	R-A	30.9	17.0	9.6	YC	Flake Source
1Pi61	72-31	Feature 63	R-A	20.0	15.0	7.0	YC	Flake Source
1Pi61	45-24	Feature 36	R-A	18.0	15.9	8.7	YC	Flake Source
1Gr1x1	185-13	Feature 38	R-P	31.4	20.0	16.0	YC	Flake Source
1Gr2	243-6	550N 320E Level 5	R-P	37.8	19.8	11.2	YC	Flake Source
1Gr2	237-13	660N 340E Level 7	R-P	66.0	27.0	18.5	YC	Flake Source
1Gr2	243-5	550N 320E Level 5	R-P	34.3	19.1	13.6	YC	Flake Source

Key — Core Classes

R-A = Ridge Area
R-P = Ridge Point
O-P = Opposing Point
O-R = Opposing Ridge
P-A = Point Area
MDRA = Multiple Direction-Right Angle
PBS = Pseudo Burin Spall

Immeasurable --
* Heavy Duty Chopper - Scrapers

Table 1. Sites 1Gr2, 1Grlxl, 1Gr50, 1Pi61 Bipolar Cores, Splintered Wedges, Scraper Planes (Continued).

Measurements in Millimeters

Site	Cat. No.	Provenience	Class	Length	Width	Thickness	Raw Material	Use
1Gr50	69-2	445L25 Level 6	R-P	35.9	30.3	9.6	YC	Flake Source Splintered Wedge
1Gr50	69-1	445L25 Level 6	R-P	48.5	24.3	15.5	YC	Flake Source Splintered Wedge
1Gr50	69-3	445L25 Level 6	R-P	50.8	32.8	19.0	YC	Flake Source Splintered Wedge
1Gr50	69-4	445L25 Level 6	R-P	43.8	29.6	18.6	YC	Flake Source
1GrlX1	138-4	500N R600 Level 5	O-P	19.5	8.4	6.0	YC	Flake Source
1Gr50	33-4	290L40	O-P	24.0	8.0	3.0	YC	Flake Source Splintered Wedge
1Gr2	218-14	790N 360E Level 6	O-R	28.2	13.6	4.9	YC	Flake Source
1Gr50	46-3	355R5 Level 4	O-R	44.2	29.9	13.9	YC	Flake Source Splintered Wedge
1Gr50	76-1	110L40 Level 4	O-R	19.5	18.9	6.5	YC	Flake Source Splintered Wedge
1Gr50	77-1	110L40 Level 5	P-A	24.2	20.2	13.8	YC	Flake Source
1Gr50	47-2	355R5 Level 5	P-A	23.0	15.0	9.4	YC	Flake Source
1Grlxl	118-7	460N R500 Level 5	MDRA	46.8	35.5	12.4	YC	Scraper Plane

Key — Core Classes

R-A = Ridge Area
R-P = Ridge Point
O-P = Opposing Point
O-R = Opposing Ridge
P-A = Point Area
MDRA = Multiple Direction-Right Angle
PBS = Pseudo Burin Spall

Immeasurable --
* Heavy Duty Chopper - Scrapers

Table 1. Sites 1Gr2, 1Gr1x1, 1Gr50, 1Pi61 Bipolar Cores, Splintered Wedges, Scraper Planes (Continued).

Measurements in Millimeters

Site	Cat. No.	Provenience	Class	Length	Width	Thickness	Raw Material	Use
1Gr1x1	110-6	480N R500 Level 4	MDRA	--	33.5	10.9	RC	Scraper Plane
1Gr1x1	118-5	460N R500 Level 5	MDRA	--	27.8	14.0	Misc.	Scraper Plane
1Gr2	217-1	790N 360E Level 5	MDRA	41.5	41.5	11.4	YC	Scraper Plane
1Gr2	228-3	550N 360E Level 7	MDRA	43.0	28.9	19.0	YC	Scraper Plane
1Gr2	237-6	660N 340E Level 7	MDRA	44.8	40.1	19.0	Misc.	*
1Gr2	217-5	790N 360E Level 5	MDRA	52.9	29.0	17.3	Misc.	*
1Gr2	235-2	660N 340E Level 5	MDRA	42.4	30.9	14.8	YC	Scraper Plane
1Gr2	243-3	550N 320E Level 5	MDRA	45.1	31.5	15.8	YC	Scraper Plane
1Gr2	218-3	790N 360E Level 6	MDRA	45.2	39.2	12.9	YC	Scraper Plane
1Gr2	219-3	790N 360E	MDRA	--	38.5	10.8	Misc.	*
1Gr2	244-1	550N 320E Level 6	MDRA	61.5	40.2	10.0	YC	Scraper Plane
1Gr50	55-1	410L45	MDRA	39.0	28.7	14.0	Misc.	*
1Gr1x1	132-3	440N R500 Level 5	PBS	39.0	28.6	14.0	Misc.	*
1Gr1x1	186-74	Feature 39	PBS	15.4	6.5	4.2	Misc.	
1Gr1x1	177-188	Feature 30	PBS	12.8	5.5	3.5	FPC	

Key — Core Classes

R-A = Ridge Area
R-P = Ridge Point
O-P = Opposing Point
O-R = Opposing Ridge
P-A = Point Area
MDRA = Multiple Direction-Right Angle
PBS = Pseudo Burin Spall

Immeasurable --
* Heavy Duty Chopper - Scrapers

Table 2. Sites 1GrlXl, 1Gr2, Uniface and Biface Cobble Core/Flake Tools.

Site	Catalogue Number	Provenience	Class	Length	Width	Thick-ness	Raw Material	Edge Angle	Category
1Grlxl	131-3	440NR500 Level 14	Flake	33.6	19.8	5.7	YC	75°	Hafted end scraper
1Grlxl	117-3	460NR500 Level 14	Flake	26.8	19.2	6.2	YC	68°	Hafted end scraper
1Grlxl	118-1	460NR500 Level 5	Flake				YC	66°	Hafted end scraper
1Grlxl	118-8	460NR500 Level 5	Flake	39.3	29.5	10.3	Misc.	76°	Hafted end scraper
1Gr2	228-2	500N360E Level 7	Flake				T.Q.	76°	Hafted end scraper*
1Grlxl	140-2	500NR600 Level 7	Flake	25.4	20.4	4.2	Misc.	65°	Scraper
1Grlxl	111-16	480NR500 Level 15	Flake	28.8	26.2	8.0	T.Q.	66°	Scraper
1Grlxl	147-2	Feature 6	Flake	30.2	25.8	12.0	YC	68°	Scraper
1Grlxl	131-5	440NR500 Level 4	Cobble	53.4	28.7	11.3	YC	67°	Adze
1Gr2	237-5	660N340E Level 7	Cobble	50.9	34.4	12.9	Misc.	52°	Adze
1Gr2	261-2	540N460E 3.4-3.6	Cobble	41.2	33.3	12.1	YC	69°	Adze
1Gr2	237-4	660N340E Level 7	Cobble	59.2	36.4	16.4	YC	61°	Adze*
1Grlxl	190-3	Feature 43	Cobble	-	-	7.7	YC	44°	Wedge-chisel
1Grlxl	117-9	460NR500 Level 4	Cobble	-	27.6	8.9	Misc.	49°	Wedge-chisel
1Gr2	217-2	790N360E	Cobble	-	31.3	8.2	YC	45°	Wedge-chisel
		Level 5	Cobble	40.4	29.0	11.4	YC	40°	Wedge-chisel
1Grlxl	118-6	460NR500 Level 5	Cobble	56.7	28.2	23.3	YC	58°	Gouge-wedge
1Gr2	243-9	550N320E Level 5	Cobble	76.7	27.9	18.2	YC	53°	Gouge-wedge
1Gr2	217-6	790N360E Level 5	Cobble	54.5	29.9	17.2	YC	63°	Gouge-wedge
1Gr2	261-7	550N320E 3.4-3.6	Cobble	51.8	28.4	23.6	YC	60°	Gouge-wedge
1Gr2	243-7	550N320E Level 5	Cobble	58.0	34.0	18.3	YC	55°	Gouge-wedge
1Grlxl	111-2	480NR500 Level 5	Cobble	46.0	39 0	8.1	YC	60°	Scraper
1Gr2	235-1	660N360E Level 5	Cobble	46.4	33.6	11.0	YC	70°	Scraper
1Gr2	218-2	790N360E Level 6	Cobble	50.2	35.9	11.4	YC	51°	Scraper
1Gr2	218-4	790N360E Level 6	Cobble	48.2	33.7	8.9	YC	55°	Scraper/ knife

* Denotes biface tool
\- Immeasurable

Table 3. Use-Wear on Archaic Tool Categories.

Category	Edge Rounding	Edge Faceting	Edge Smoothing	Edge Polishing	Edge Blunting	Edge Crushing	Edge Striation	Edge Grinding	Step Flaking	Surface Scratch	Surface Rounding	Surface Smoothing	Surface Polishing	Surface Grinding
Hafted End Scraper	x	-	x	x	-	-	-	-	x	-	x	x	x	-
Hafted End Scraper	x	-	x	x	-	-	x	-	-	-	-	x	x	-
Hafted End Scraper	x	-	x	x	-	-	x	-	-	-	-	x	x	-
Hafted End Scraper	x	-	x	x	x	x	-	-	x	-	-	-	-	-
Hafted End Scraper	x	-	x	-	-	-	-	-	-	-	-	-	-	-
Hafted End Scraper	x	-	x	x	-	x	-	-	x	-	-	-	-	-
Flake Scraper	x	-	x	x	-	-	-	-	x	-	-	x	x	-
Flake Scraper	x	-	x	x	-	-	-	-	-	-	-	-	-	-
Adze	x	-	x	-	x	-	-	-	x	-	-	-	-	-
Adze	x	-	x	-	x	-	-	-	-	-	-	-	x	-
Adze	x	-	x	-	-	x	-	-	-	-	-	-	-	-
Chisel-Wedge	x	-	x	x	-	-	-	-	x	-	-	-	-	-
Chisel-Wedge	-	-	-	-	x	-	-	-	x	-	-	-	-	-
Chisel-Wedge	x	-	x	-	-	-	-	-	-	-	-	-	-	-
Chisel-Wedge	-	x	-	-	x	-	-	-	x	-	-	-	-	-
Gouge-Wedge	x	-	-	x	x	-	-	-	-	-	-	-	-	-
Gouge-Wedge	x	-	-	-	x	x	-	-	-	-	-	-	-	-
Gouge-Wedge	x	-	-	-	-	-	-	-	x	-	-	-	-	-
Gouge-Wedge	x	-	-	x	-	x	-	-	x	-	-	-	-	-
Gouge-Wedge	x	-	x	-	-	-	-	-	-	x	-	-	-	-
Cobble Scraper	x	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobble Scraper	x	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobble Scraper	x	-	-	x	-	-	-	-	-	-	-	-	-	-
Knife/Scraper	x	-	-	-	-	-	-	-	-	-	-	-	-	-
Biface Adze	x	-	-	x	-	-	x	-	x	x	x	-	x	-
MDRA Scraper Plane	-	-	-	-	-	x	-	-	x	-	-	-	-	-
MDRA Scraper Plane	x	x	-	-	x	x	-	-	x	-	-	x	x	-
MDRA Scraper Plane	x	x	-	-	x	-	-	-	x	-	-	x	-	-
MDRA Scraper Plane	-	-	-	-	x	-	-	-	x	-	-	-	-	-
MDRA Scraper Plane	-	-	-	-	-	-	-	-	x	-	-	-	-	-
MDRA Scraper Plane	-	-	-	-	x	-	-	-	x	-	-	-	-	-

x = present
\- = absent

CHAPTER IV

A CLASSIFICATION OF PROJECTILE POINTS

Projectile point classifications are frequently concerned with historical phenomena. No other class of stone artifacts exhibits as much stylistic variability within the Southeast (Faulkner and McCollough 1973: 66), and it is no wonder that several systems have come into existence (cf. Kneberg 1956, Cambron and Hulse 1964, and 1975, Bell 1958). Such stylistic variability may occur among other classes of stone artifacts, but none appears in the same abundance providing an adequate sample to permit comparison over large areas and long periods of time.

The projectile point classes discussed here meet the requirements for true classes since a prescribed set of attributes must be possessed by an object to be considered a member of that class. Projectile points are classified by the consideration of nine attributes. These classes make up the basis for the projectile point clusters, types, and varieties discussed later on.

The system uses shape attributes in the formation of classes. These include shape complexity, haft element modification, blade shape, base shape, base orientation, shoulder shape, shoulder orientation, haft element shape, and lateral haft element orientation. This system follows Futato (1977: 36-62 and here as Appendix IV). Sometimes it becomes necessary to introduce values of measurement in order to determine classes insufficiently discriminated by shape alone. These cases will be evident in the following descriptions. Table 4 summarizes the measurement criteria for all classes.

These projectile point shapes are classes of form. They are of slight value in themselves, but they do provide something easily determined and useful for comparative purposes which can be used to establish projectile point types, varieties and clusters.

The definitions are given on the following pages using the following format more or less: the descriptive attributes are given; the raw materials noted; the presence or absence of thermal alteration is mentioned; the method of manufacture is discussed. Instances which deviate from this will be commented upon at the time of presentation.

Artifacts used in this analysis came from various excavations and surveys, as well as the five sites excavated during the 1976-1977 field seasons. A collection of 1369 identifiable projectile points and 613 fragments was used.

CLASS CRITERIA

Class 1 (Fig. 11). Vertex Class 3, no lateral haft element modification, straight blade edges, straight base, no shoulder, no lateral haft element edge. Length no greater than 25 mm. This class is separated from Class 2 by being generally shorter (the division is arbitrary).

N=210: 205 were made from local thermally altered chert; 5 were of local yellow chert.

Light percussion flaking was used to produce these and flaking quality varies. Sometimes both soft percussion and pressure retouch occur. Sometimes only pressure flaking is used to produce a well thinned point. Obviously we could provide procedural modes and divide this class further, if necessary. Cross sections vary from thick to biconvex to flattened.

Class 2 (Fig. 11). Vertex Class 3, no lateral haft element modification, straight blade edges, straight base, no shoulder, no lateral haft element edge. Greater than 25 mm in length.

N=107: 105 were made from local thermally altered chert; 2 were of local yellow chert.

Class 2 is large Class 1 points.

Flaking procedures are the same as Class 1, but there may be more retouch on these. The cross section is biconvex to flattened.

Class 3 (Fig. 11). Vertex Class 3, no lateral haft element modification, straight blade edges, straight base, no shoulder, no lateral haft element edge. Length indeterminable.

N=32: all were made from locally thermally altered chert.

This class is reserved for fragmentary members of the two preceding classes.

Flaking is similar to Classes 1 and 2. Cross sections are either flattened or biconvex.

Class 4 (Fig. 12). Vertex Class 3, no lateral haft element modification, straight blade edges, incurvate base, no shoulder, no lateral haft element edge. Length less than or equal to 25 mm.

N=147: 138 were made of local thermally altered chert; 8 were of local yellow chert; 1 was of a blue Bangor chert procured elsewhere.

This class is a basal edge variant of shape Classes 1 and 2. It is smaller than Class 5.

Flaking seems to be by percussion with little pressure retouch. Many are crudely flaked, although some do exhibit pressure flaking which carries 3-4 mm across the face. The proximal portion of the point is thinned basally. Cross section is usually biconvex but may be flattened.

Class 5 (Fig. 12). Vertex Class 3, no lateral haft element modification, straight blade edges, incurvate base, no shoulder, no lateral haft element edge. Greater than 25 mm in length.

N=37: 36 were made from local thermally altered chert; the other was of local yellow chert.

This class contains large members of Class 4. The division is arbitrary.

Class 6 (Fig. 12). Vertex Class 3, no lateral haft element modification, straight blade edges, incurvate base, no shoulder, no lateral haft element edge. Length indeterminable.

N=21: 20 were made from local thermally altered chert; one was made from local yellow chert.

This class contains fragmentary members of Classes 4 and 5. The length of these specimens could not be measured.

Flaking is similar to Classes 4-5 and cross section is biconvex to flattened.

Class 7 (Fig. 12). Vertex Class 3, no lateral haft element modification, straight blade edges, excurvate base, no shoulder, no lateral haft element edge.

N=18: all were made from local thermally altered chert.

Flaking is similar to Classes 1-6 with a predominance of percussion and some pressure retouch. Cross section is biconvex to flattened.

Class 8 (Fig. 13). Vertex Class 3, no lateral haft element modification, straight blade edges, recurvate base, no shoulder, no lateral haft element edge.

N=17: all were made from local thermally altered chert.

Flaking is similar to Class 1 and the cross section is biconvex to flattened.

Class 9 (Fig. 13). Vertex Class 3, no lateral haft element modification, excurvate blade edges, straight base, no shoulder, no lateral element edge. Less than or equal to 25 mm in length.

N=34: all but one were made from local thermally altered chert; the other is made from local yellow chert.

This class contains members of Class 10 less than 25 mm in length. The length characteristic is an arbitrary one and some may even be reworked Class 10 artifacts.

Flaking is by broad-medium-shallow percussion. Pressure retouching appears along blade margins. Cross section is usually flattened but some are slightly biconvex.

Class 10 (Fig. 13). Vertex Class 3, no lateral haft element modification, excurvate blade edges, straight base, no shoulder, no lateral haft element edge. Length greater than 25 mm.

N=129: 128 were made from local thermally altered chert; the other was of local yellow chert.

This class contains Class 9 members longer than 25 mm.

These points were produced by broad, shallow percussion flaking. Retouching occurs along the blade margins, with delicate percussion forming a smooth regular bifacial edge. The proximal end of the blade is basally thinned to facilitate hafting. Cross section is usually flattened, sometimes biconvex.

Class 11 (Fig. 13). Vertex Class 3, no lateral haft element modification, excurvate blade edges, straight base, no shoulder, no lateral haft element edge. Length indeterminate.

N=8: all were made of local thermally altered chert.

This class contains broken members of Classes 9 and 10. We do not know the length of these.

Flaking is similar to Classes 9-10. Some of these were resharpened. Cross section is usually flattened, but may be biconvex.

Class 12 (Fig. 13). Vertex Class 3, no lateral haft element modification, excurvate blade edges, excurvate base, no shoulders, no lateral haft element edge.

N=45: 42 were made from local thermally altered chert; 3 were of local yellow chert.

Flaking is similar to Classes 9-11, with light broad percussion flake scars. Cross section is usually flattened, but some are biconvex.

Class 13 (Fig. 14). Vertex Class 3, no lateral haft element modification, excurvate blade, incurvate base, no shoulder, no lateral haft element edge. Length no greater than 50 mm.

N=31: all were made of local thermally altered chert.

These were produced by percussion flaking with some retouch along blade margins. Some examples are finely pressure flaked around the margin. Flaking quality varies greatly. Cross section may be either flattened or biconvex.

Class 14 (Fig. 14). Vertex Class 3, no lateral haft element modification, excurvate blade edges, recurvate base, no shoulders, no lateral haft element edge.

N=6: all were made from local thermally altered chert.

Flaking is similar to the previous class. Cross section is a flattened biconvex.

Class 15 (Fig. 14). Vertex Class 3, no lateral haft element modification, incurvate blade edges, straight base, no shoulders, no lateral haft element edge.

N=10: these were made from local thermally altered chert.

Flaking is similar to Classes 1 and 2 with various kinds of flaking present. Cross section is flat or biconvex.

Class 16 (Fig. 14). Vertex Class 3, no lateral haft element modification, incurvate blade edges, incurvate base, no shoulder, no lateral haft element edge.

N=8: all were made from local thermally altered chert.

Flaking is similar to Classes 1 and 2. Cross section is flattened or biconvex.

Class 17 (Fig. 14). Vertex Class 3, no lateral haft element modification, incurvate blade edges, recurvate base, no shoulder, no lateral haft element edge.

N=3: all were made from local thermally altered chert.

Flaking is similar to Classes 1 and 2. Cross section is flattened and biconvex.

Class 18 (Fig. 14). Vertex Class 3, no lateral haft element modification, recurvate blade, excurvate base, no shoulder, no lateral haft element edge.

N=1: this example was made of local thermally altered chert.

Flaking is similar to Classes 1 and 2.

Class 19 (Fig. 14). Vertex Class 3, no lateral haft element modification, recurvate blade edges, straight base, no shoulder, no lateral haft element edge.

N=10: 9 were made from local thermally altered chert; one was made from local yellow chert.

Flaking is similar to Classes 1 and 2. Cross section is flattened or biconvex.

Class 20 (Fig. 14). Vertex Class 3, no lateral haft element modification, recurvate blade edges, incurvate base, no shoulder, no lateral haft element edge.

N=12: all were made from local thermally altered chert.

Flaking is similar to Classes 1 and 2. Cross section is flattened or biconvex.

Class 21 (Fig. 14). Vertex Class 3, no lateral haft element modification, recurvate blade edges, recurvate base, no shoulders, no lateral haft element edge. Length no greater than 50 mm.

N=4: all were made of local thermally altered chert.

Flaking is similar to Classes 1 and 2. Cross section is flattened or biconvex.

Class 22 (Fig. 15). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, incurvate expanding lateral haft element edge.

N=4: all were made from local thermally altered stone.

Flaking was by haphazard percussion which produced a median ridge on the blade of some specimens. These crudely flaked artifacts appear to be projectile points, which is why they are included here. They could, however, be something else. Cross section is thickened to biconvex.

Class 23 (Fig. 15). Vertex Class 5, diagonally modified haft element, straight blade edges, excurvate base, straight tapered shoulders, no lateral haft element edge.

N=17: 5 were made from nonlocal Tallahatta quartzite; 9 were made from local yellow chert; 3 were of local thermally altered chert.

Flaking is by haphazard percussion. Little secondary retouch occurs and the cross section is thickened to biconvex.

Class 24 (Fig. 15). Vertex Class 5, diagonally modified haft element, excurvate blade edges, straight base, straight tapered shoulders, straight contracting lateral haft element edge.

N=1: this was made from local thermally altered chert.

The point was produced by percussion flaking. Slight retouch produces a regular biface edge. Cross section is biconvex.

<u>Class 25</u> (Fig. 15). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate horizontal shoulders, straight contracting lateral haft element edge.

N=4: 2 were made from local thermally altered chert; 2 were made of local yellow chert (one of these has a glossy surface).

Primary flaking was percussion, with some retouch with a soft hammer or pressure. One of the thermally altered specimens was retouched along the blade margins. Cross section is biconvex.

<u>Class 26</u> (Fig. 15). Vertex Class 5, diagonally modified haft element, straight blade edges, angular external base, straight horizontal shoulders, no lateral haft element edge.

N=1: this was made of local thermally altered stone.

Percussion flaking was used in shaping this point. Light percussion was also used in retouching the blade edges. Cross section is biconvex.

<u>Class 27</u> (Fig. 15). Vertex Class 5, diagonally modified haft element, excurvate blade edges, straight base, excurvate tapered shoulders, excurvate convex lateral haft element edge.

N=2: one was made of local thermally altered stone; the other was of local yellow chert.

Flaking was by hard hammer percussion with no secondary retouch. Cross section is thickened.

<u>Class 28</u> (Fig. 15). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, straight contracting lateral haft element edge.

N=3: all were made from local thermally altered stone.

Only percussion flaking was used to manufacture two of the specimens; a third is thinner in cross section and exhibits fine pressure retouch along the blade. Four flake scars separate the haft element and the blade edges on this specimen. Cross section is biconvex on two examples and flattened on the retouched point.

<u>Class 29</u> (Fig. 15). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, straight contracting lateral haft element edge.

N=4: all were made from local thermally altered chert.

A combination of light percussion and pressure flaking was utilized in producing the thin cross section and regular blade edge configuration exhibited by these points. Cross section is flattened.

Class 30 (Fig. 16). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, straight expanding lateral haft element edge.

N=2: both were made from local thermally altered chert.

The artifacts are very thin in cross section and exhibit fine pressure retouch along all edges. Cross section is flattened.

Class 31 (Fig. 16). Vertex Class 7, laterally modified haft element, straight blade edges, incurvate base, incurvate tapered shoulders, excurvate expanding lateral haft element edge.

N=1: this was made of local yellow chert (flake scars are somewhat glossy suggesting heat application).

The straight blade edges, incurvate base, and excurvate expanding lateral haft element edge are formed by several flake scars which create a notched effect.

Class 32 (Fig. 16). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight horizontal shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking on this specimen was a combination of light percussion with regular bifacial edges produced by secondary retouch. Broad percussion flakes were removed to form the sharply expanding haft element edge. Cross section is flattened.

Class 33 (Fig. 16). Vertex Class 7, diagonally modified haft element, straight blade edges, incurvate base, incurvate tapered shoulders, angular expanding lateral haft element edge.

N=1: this was made of local thermally altered chert.

Flaking and cross section are similar to Classes 30 and 32.

Class 34 (Fig. 16). Vertex Class 7, diagonally modified haft shoulders, incurvate expanding lateral haft element edge.

N=7: 6 of these were made from local thermally altered stone; one was made of nonlocal Tallahatta quartzite.

The technique of manufacture and cross section are similar to Class 33.

Class 35 (Fig. 16). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight tapered shoulders, straight expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is similar to that of Classes 33 and 34 with a single flake removed to form a slight notch. Cross section is flattened.

Class 36 (Fig. 16). Vertex Class 5, laterally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=3: all were made from local thermally altered stone.

Broad random percussion flaking was used in the manufacture of these artifacts. A minimum of pressure retouch occurs on one or more edge segments. Broad shallow side notches are formed by the removal of several alternating percussion flakes from the lateral haft element edge. These artifacts are biconvex in cross section, with slight medial ridges present on some blade surfaces due to convergent bifacial flaking. Cross section is biconvex.

Class 37 (Fig. 16). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, incurvate concave lateral haft element edge.

N=3: all were made from local thermally altered stone.

Technique of manufacture is by non-patterned percussion flaking. The base is formed by transverse fracture on two of the specimens. Cross section is thickened to biconvex.

Class 38 (Fig. 16). Vertex Class 7, diagonally modified haft element, incurvate blade edges, straight base, straight tapered shoulders, straight expanding lateral haft element edge.

N=3: two of these were made from nonlocal siliceous stone (one of Tallahatta quartzite and the other of blue-gray Fort Payne chert); the third is of thermally altered Camden chert.

These specimens appear to have been reshaped into hafted drills or gouges. Flaking is largely percussion with some retouch on one blade margin. Cross section is median ridged with hinge fractures commonly occurring along the medial ridge.

Class 39 (Fig. 16). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, straight expanding lateral haft element edge.

N=5: all were made from local thermally altered chert. There is one, though, which may be Camden chert. The characteristic pink color of thermally altered Tuscaloosa gravels (Camden) is evident on this sample, and such coloring is rare in thermally altered central Tombigbee cherts.

Flaking is by percussion with pressure retouch present on one example. Numerous hinge fractures terminate at a medial ridge on some. Their cross section is thick and median ridged and one is plano-convex. The others are percussion flaked with secondary retouch on the blade margins. Their cross section is flattened to biconvex.

Class 40 (Fig. 16). Vertex Class 3, unmodified haft element, recurvate blade edges, recurvate base, no shoulder, no lateral haft element edge. Length at least 50 mm.

N=1: the single specimen was made from gray Fort Payne chert.

Flaking is by percussion with fine pressure retouch along some portions of the margin. A ridge runs along the mid-line, formed by wide, feathered flake terminations which originate from opposing platforms. Light wear shows on the proximal one third of the specimen. Cross section is biconvex.

Class 41 (Fig. 16). Vertex Class 5, diagonally modified haft element, excurvate blade edges, excurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=3: two of these were made of local thermally altered chert; the other was made from Tallahatta quartzite.

Flaking is by non-patterned percussion with no secondary retouching. These artifacts are thick in cross section.

Class 42 (Fig. 17). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, excurvate tapered shoulders, angular convex lateral haft element edge.

N=5: four were made from local thermally altered chert; the fifth was of local yellow chert.

Flaking on these specimens is primarily by haphazard percussion, though one specimen exhibits fine pressure retouch distally on a small blade margin segment. These artifacts are biconvex in cross section.

Class 43 (Fig. 17). Vertex Class 5, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=9: six were made from local thermally altered chert; two were made of local yellow chert; and one was of blue-gray Fort Payne chert.

Flaking quality varies according to the stone. Four thermally altered examples exhibit light percussion retouch along most of the blade margins. The other four are less finely flaked, three possessing hinge fractures terminating near the mid-line. These artifacts are biconvex in cross section.

Class 44 (Fig. 17). Vertex Class 5, diagonally modified haft element, excurvate blade edges, excurvate base, straight tapered shoulders, excurvate convex lateral haft element edge.

N=1: this was made from local thermally altered stone.

Flaking is similar to Class 41. Cross section is biconvex.

Class 45 (Fig. 17). Vertex Class 5, diagonally modified haft element, straight blade edges, excurvate base, straight tapered shoulders, excurvate convex lateral haft element edge.

N=1: this was made of local yellow chert.

Hard hammer percussion flaking is evident on the blade surfaces and the abruptly terminated flake scars form a thick cross section. No secondary retouch is present.

Class 46 (Fig. 17). Vertex Class 5, diagonally modified haft element, excurvate blade edges, excurvate base, straight tapered shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from local thermally altered stone.

Manufacture is by hard hammer percussion without secondary retouch. Many hinge fractures terminate near the mid-line. The specimen is biconvex in cross section.

Class 47 (Fig. 17). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, excurvate convex lateral haft element edge.

N=2: these were made from local thermally altered chert.

Flaking is by random percussion with minimal secondary retouch. Cross section is thick on both specimens.

Class 48 (Fig. 17). Vertex Class 5, unmodified haft element, straight blade edges, excurvate base, no shoulders, straight contracting lateral haft element edge.

N=1: this was made from local thermally altered stone.

Flaking is a combination of percussion and pressure retouch, forming a very regular sinuous bifacial blade edge. Cross section is plano-convex with several hinge fractures terminating near the mid-line on one surface.

Class 49 (Fig. 17). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=2: these appear to be made from local thermally altered stone; one is an unusual pink color frequently associated with artifacts from northwestern Alabama and northeastern Mississippi (Camden chert).

Flaking is primary hard hammer percussion and light secondary soft hammer percussion with a minimum of pressure retouch. The result is a fine even edged bifacial blade forming a relatively thin biconvex cross section. The notches are formed by the removal of several alternate percussion flakes in the proximal portion of the specimen.

Class 50 (Fig. 17). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from thermally altered Camden chert.

Flaking is by random percussion with no secondary retouch. A broad notching effect is achieved by the application of alternate blows to both faces of the proximal portion of the artifact. Cross section is biconvex.

Class 51 (Fig. 18). Vertex Class 7, excurvate blade edges, excurvate base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=3: all were of local thermally altered stone.

Several deep hinge fracture terminations occur along the mid-line, the result of blows applied transversely to the blade margins. Minimal secondary retouch occurs. Cross section is biconvex, with a slight medial ridge occurring on one example.

Class 52 (Fig. 18). Vertex Class 7, diagonally modified haft element, recurvate blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=5: three were made from local thermally altered chert; one was made from gray Fort Payne chert and one was of Tallahatta quartzite.

Percussion flaking forms a ridge along the mid-line on four examples. Fine secondary pressure retouch is present on one artifact. Cross section is plano-convex on one example and biconvex on the remainder. A transverse snap forms the base on the Tallahatta quartzite specimen.

Class 53 (Fig. 18). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, recurvate concave lateral haft element edge.

N=1: this was made from local yellow chert.

Broad, deep conchoidal flake scars were created through a series of hard hammer percussion blows and these terminate forming a medial ridge.

No secondary flaking occurs and the cross section is thick.

Class 54 (Fig. 18). Vertex Class 7, diagonally modified haft element, recurvate blade edges, excurvate base, straight tapered shoulders, straight parallel lateral haft element edge.

N=4: three were made from local thermally altered stone; the other was made of local yellow chert.

These asymmetrical artifacts were created by heavy non-patterned percussion flaking with some light percussion retouch. Transverse cross section is biconvex and the lateral cross section gives the impression of a bifacially-flaked flake blank.

Class 55 (Fig. 18). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, straight parallel lateral haft element edge.

N=24: five of these were made from Tallahatta quartzite; one was of local yellow chert; the rest were made from local thermally altered chert.

These are flaked by percussion. Secondary flaking occurs in the form of light percussion and pressure retouch. Some examples have a slightly serrated appearance. Cross section is biconvex. Four artifacts were flaked by hard hammer percussion with numerous hinge fractures on one or more faces. Little secondary retouch is present on these examples. Cross section is biconvex.

Class 56 (Fig. 19). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, straight parallel lateral haft element edge.

N=8: these were made from local thermally altered chert.

Flaking is a combination of primary hard hammer percussion and light secondary retouch. Several examples are resharpened so that the blade becomes reduced substantially both in length and breadth. The resharpening has produced a beveled blade cross section on three examples. Cross section is biconvex in five cases with thickened cross sections due somewhat to blade rejuvenation in the others.

Class 57 (Fig. 19). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, straight contracting lateral haft element edge.

N=50: thirteen were made from Tallahatta quartzite; one was made from Fort Payne chert; six were made of local yellow chert; the remainder (thirty) were of local thermally altered chert.

Flaking is similar to that of Class 55. Four examples have a base formed by transverse fractures. Four of the smaller examples exhibit a thickened cross section and are lanceolate. Cross section is biconvex.

Class 58 (Fig. 19). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, straight tapered shoulders, straight contracting lateral haft element edge.

N=11: three were made from Tallahata quartzite; three were made from local yellow chert; five were of local thermally altered chert.

Flaking and cross section are similar to Class 57.

Class 59 (Fig. 19). Vertex Class 7, excurvate blade edges, excurvate base, excurvate tapered shoulders, straight contracting lateral haft element edge.

N=6: all were made from local thermally altered chert.

Flaking on these specimens is by percussion with a minimum of secondary retouch. Numerous hinge and step fractures occur on these artifacts. Cross section on four examples is plano-convex; the other two possess a biconvex cross section.

Class 60 (Fig. 20). Vertex Class 7, straight blade edges, excurvate base, incurvate tapered shoulders, straight contracting lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is by random percussion with some light retouch along a portion of the blade edges. Cross section is biconvex.

Class 61 (Fig. 20). Vertex Class 5, unmodified haft element, straight blade edges, straight base, no shoulders, straight contracting lateral haft element edge.

N=4: two were made from nonlocal Tallahatta quartzite; two were of from local thermally altered chert.

These points may be resharpened Class 57 objects. A medial ridge is formed through the resharpening process and extends along the blade midline from the haft element to the tip on three examples. The other artifact may have snapped during a resharpening attempt as a deep conchoidal flake scar ends in an abrupt step fracture along the transverse break. Cross section is median ridged.

Class 62 (Fig. 20). Vertex Class 7, diagonally modified haft element, incurvate blade edges, straight base, incurvate horizontal shoulders, straight contracting lateral haft element edge.

N=1: this was made from local thermally altered chert.

This has been percussion flaked and retouched along the blade margins. A medial ridge is present on one surface, formed by opposing flake terminations. Pressure retouching gives a slightly serrated appearance to some parts of the blade margin. The base is formed by a transverse fracture. Cross section is biconvex.

Class 63 (Fig. 20). Vertex Class 7, excurvate blade edges, straight base, incurvate tapered shoulders, straight parallel lateral haft element edge. Basal width less than 28 mm.

N=1: this was made from local thermally altered stone.

Primary percussion flakes were removed to form the base before the secondary retouch. The base is formed by transverse fracture. Cross section is biconvex.

Class 64 (Fig. 20). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=3: these were made from Tallahatta quartzite.

These were flaked by percussion. One specimen retains a finely retouched blade edge. Cross section is biconvex.

Class 65 (Fig. 20). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, straight horizontal shoulders, straight parallel lateral haft element.

N=1: this is made from local thermally altered chert.

This was flaked by random percussion and then pressure flaked into a finely serrated bifacial blade margin. Cross section is biconvex.

Class 66 (Fig. 20). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, straight tapered shoulders, straight parallel lateral haft element edge.

N=3: one was made from local thermally altered chert; the other two were made from thermally altered nonlocal Camden chert.

These are flaked by percussion and finely retouched by pressure along the blade margins. Cross section is biconvex with two examples possessing a medial ridge on one surface, giving a slightly thickened appearance.

Class 67 (Fig. 20). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, straight tapered shoulders, excurvate expanding lateral haft element edge.

N=4: three were made from local thermally altered chert; the other was of nonlocal Camden chert.

Flaking is similar to Class 66 with very fine pressure flaking resulting in a serrated blade margin. One example has a base formed by transverse fracture. Cross section is biconvex.

Class 68 (Fig. 20). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate barbed shoulders, straight parallel lateral haft element edge.

N=2: one was made from mottled gray Fort Payne chert; the other was made from blue-gray Bangor chert.

Flaking is of good quality. A barbed appearance results from deep flake scars diagonal to the proximal end of the haft element, giving a slight corner notched effect. One has a base formed by transverse fracture. Cross section is biconvex.

Class 69 (Fig. 20). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate barbed shoulders, incurvate concave lateral haft element edge.

N=4: two were made from local yellow chert; one was of local thermally altered chert; one was made of a glossy mottled reddish-gray material similar to the Pickwick chert.

Flaking is by percussion with pressure retouch on the blade margins. One example has a base formed by transverse fracture. Cross section is biconvex.

Class 70 (Fig. 21). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, incurvate barbed shoulders, straight expanding lateral haft element edge.

N=2: one was made from a glossy local yellow chert; the other was made from local thermally altered chert.

Flaking and cross section are similar to Class 69.

Class 71 (Fig. 21). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, incurvate barbed shoulders, straight parallel lateral haft element edge.

N=1: this was made from local thermally altered stone.

Flaking and cross section are similar to Class 69.

Class 72 (Fig. 21). Vertex Class 9, diagonally modified haft ele-

ment, straight blade edges, straight base, straight horizontal shoulders, angular convex lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking and cross section are similar to Class 69 and the base is formed by a transverse fracture.

Class 73 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight horizontal shoulders, straight parallel lateral haft element edge. Width-length ratio less than 2:1 for haft element.

N=5: two were made from blue-gray Bangor chert; one was made from quartzite; one was made of local yellow chert; one was of local thermally altered chert.

Flaking is by percussion with pressure retouch along the blade margins in two cases. Another example has a transverse fracture forming the base. Cross section is biconvex.

Class 74 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, incurvate concave lateral haft element edge.

N=3: all were made from mottled blue-gray Fort Payne chert.

The blade and haft element were percussion flaked with alternating blows creating the side notched effect. A medial ridge occurs on one surface of one example, while a transverse fracture forms the base of another. Cross section is biconvex.

Class 75 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate barbed shoulders, straight contracting lateral haft element edge.

N=2: both were made from local thermally altered chert.

Flaking is by percussion with no secondary retouch. The base of one exhibits gravel cortex. Cross section is biconvex.

Class 76 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight horizontal shoulders, straight parallel lateral haft element edge. Haft element length is less than 8 mm.

This class is like Class 103, but it has been arbitrarily divided with reference to haft element length.

N=3: all were made of local thermally altered material.

Flaking is similar to Class 75 and three examples have a transverse fracture forming the base. Cross section is biconvex.

Class 77 (Fig. 21). Vertex Class 7, diagonally modified haft element, recurvate blade edges, straight base, incurvate tapered shoulders, straight parallel lateral haft element edge.

N=2: both were made from nonlocal Tallahatta quartzite.

Flaking is by broad percussion with deep conchoidal flake scars forming the shoulders and haft element. Several deep hinge fractures occur on the blade surface of one specimen. No retouching occurs. Cross section is biconvex.

Class 78 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, excurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is similar to Class 77. The blade has been resharpened. Cross section is biconvex.

Class 79 (Fig. 21). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight barbed shoulders, straight expanding lateral haft element edge.

N=1: this was made of nonlocal Tallahatta quartzite.

Broad flake scars form the slightly retouched blade with slight retouch. Corner notches are formed by deep conchoidal percussion scars. The point has a barbed appearance. Cross section is biconvex.

Class 80 (Fig. 22). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, recurvate barbed shoulders, straight expanding lateral haft element edge.

N=2: one was made from gray Fort Payne chert; the other was made from local thermally altered chert.

Broad percussion flaking was used and pressure retouch was applied along blade margins. Deep conchoidal flake scars create the barbed shoulders and expanded haft element. Cross section is biconvex.

Class 81 (Fig. 22). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, recurvate barbed shoulders, straight parallel lateral haft element edge.

N=2: one was made from locally thermally altered chert; the other was made from dark blue Bangor chert.

Flaking and cross section are similar to Class 80.

Class 82 (Fig. 22). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate barbed shoulders, straight parallel lateral haft element edge.

N=2: both were made from local thermally altered chert.

Flaking and cross section are similar to Class 80, although one has pressure retouch creating a serrated blade margin.

Class 83 (Fig. 22). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=4: these were made from local thermally altered chert.

Flaking is by broad non-patterned percussion; two examples exhibit fine pressure retouch. Cross section is biconvex.

Class 84 (Fig. 22). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=7: six were made from local thermally altered chert; one was of nonlocal blue-gray Fort Payne chert.

Flaking is by percussion with secondary retouch on six examples. Broad, deep, conchoidal flake scars form the haft and shoulder portions on these specimens. Cross section is biconvex.

Class 85 (Fig. 22). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate horizontal shoulders, incurvate concave lateral haft element edge.

N=4: one was made from nonlocal blue-gray Fort Payne chert; one was made from local yellow chert; one was of quartzite; one was made from local thermally altered chert.

Broad non-patterned percussion flaking was used. There is no secondary retouch. The Fort Payne chert example has a transverse fracture forming the base. Cross section is biconvex.

Class 86 (Fig. 22). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, excurvate tapered shoulders, incurvate concave lateral haft element edge.

N=3: these were made from local thermally altered chert.

Broad non-patterned percussion was used. There is no secondary retouch. Cross section is biconvex.

Class 87 (Fig. 23). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, straight tapered shoulders, incurvate concave lateral haft element edge.

N=3: two were made from local thermally altered chert; one was made from thermally altered Tuscaloosa formation-derived chert.

Broad random percussion was used. There is no secondary retouch. Cross section is biconvex.

Class 88 (Fig. 23). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, recurvate expanding lateral haft element edge.

N=5: all were made from local thermally altered chert.

Non-patterned hard hammer percussion was used with little secondary retouch. A transverse fracture forms the base of one example. Cross section is biconvex with a medial ridge occurring on four of the examples.

Class 89 (Fig. 23). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, excurvate tapered shoulders, straight parallel lateral haft element edge.

N=5: two were made from local thermally altered chert; one was made from thermally altered Tuscaloosa Formation-derived chert; and two were made from nonlocal Tallahatta quartzite.

Flaking is similar to Class 88. A transverse fracture forms the base on three artifacts, including the Tallahatta example. Cross section is biconvex.

Class 90 (Fig. 23). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=3: two were made from local thermally altered chert, one from local yellow chert.

Flaking is similar to Class 88 with one example possessing numerous hinge fracture terminations on the blade surface. Cobble cortex forms the base of the two heated artifacts. Cross section is biconvex.

Class 91 (Fig. 23). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, excurvate tapered shoulders, straight contracting lateral haft element edge.

N=3: all were made from nonlocal Tallahatta quartzite.

These are percussion flaked with minimal retouch. Cross section is plano-convex on two examples and biconvex on the third.

Class 92 (Fig. 23). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, recurvate horizontal shoulders, straight contracting lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is by percussion with some retouch along the blade margins. The base is formed by transverse fracture. Cross section is biconvex.

Class 93 (Fig. 23). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, incurvate barbed shoulders, incurvate expanding lateral element edge.

N=2: one was made from nonlocal Tallahatta quartzite; one was of local thermally altered chert.

Broad non-patterned percussion forms the blade and haft area with secondary retouch on the blade margins. Cross section is biconvex.

Class 94 (Fig. 23). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight horizontal shoulders, straight contracting lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from Tallahatta quartzite.

Flaking is by percussion with some blade margin retouching. Cross section is biconvex.

Class 95 (Fig. 24). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight tapered shoulders, straight contracting lateral haft element edge.

N=3: all were made from local thermally altered stone.

Broad flake scars are presumably created by hard hammer percussion, and form the blade and haft. Retouch along the blade margins appears to be by light percussion. Cross section is biconvex.

Class 96 (Fig. 24). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate horizontal shoulders, straight contracting lateral haft element edge.

N=14: thirteen were made from local thermally altered chert; the other was made of nonlocal Tallahatta quartzite.

Many of these artifacts appear to exhibit rough percussion flaked blade and haft areas with light percussion and/or pressure retouch. Two have no retouch and two others are finely serrated around the blade margins. A transverse fracture forms the base on five examples while cortex is present on the base of one. Cross section is biconvex.

Class 97 (Fig. 24). Vertex Class 7, diagonally modified haft element, excurvate blade edge, excurvate base, incurvate horizontal shoulders, straight contracting lateral haft element edge.

N=5: three were made from local thermally altered chert; one was made of nonlocal Tallahatta quartzite, one was made from thermally altered Tuscaloosa formation-derived chert.

Flaking was by percussion, and four examples have been finely retouched around the blade margins. Cross section is biconvex except on the Tallahatta quartzite point, which is plano-convex with a medial ridge on one surface.

Class 98 (Fig. 24). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, straight tapered shoulders, straight contracting lateral haft element edge.

N=6: three were made from Tallahatta quartzite; three were made from local thermally altered chert.

Flaking is by percussion with little retouch. Three points have bases formed by transverse fracture. Cross section is plano-convex.

Class 99 (Fig. 25). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, straight tapered shoulders, straight parallel lateral haft element edge.

N=4: three were of local thermally altered chert; the remaining example was made from thermally altered Tuscaloosa formation-derived chert.

Non-patterned percussion flaking with minimal retouch was used to make these artifacts. Cortex appears on the base of the Tuscaloosa formation derived example. Cross section is biconvex.

Class 100 (Fig. 25). Vertex Class 5, diagonally modified haft element, straight blade edges, excurvate base, incurvate horizontal shoulders, no lateral haft element edge.

N=2: one was made from local yellow chert; the other was made from mottled blue-gray Fort Payne chert.

Flaking is similar to Class 98. Cross section is biconvex.

Class 101 (Fig. 25). Vertex Class 7, diagonally modified haft ele-

ment, recurvate blade edges, straight base, straight horizontal shoulders, straight parallel lateral haft element edge.

N=1: this was made from nonlocal blue-gray Fort Payne chert.

Flaking is well executed with fine retouch along the blade margins. A medial ridge is present on one blade surface and the base is formed by transverse fracture. Cross section is biconvex.

Class 102 (Fig. 25). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight horizontal shoulders, straight parallel lateral haft element edge.

N=7: two were made from local yellow chert; five were of local thermally altered chert.

Flaking is by percussion with a minimum of retouch. One has a finely retouched blade margin; another has a transverse fracture forming the base. In six cases, the cross section is biconvex: a medial ridge occurs on four of these. One has a plano-convex cross section.

Class 103 (Fig. 26). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight horizontal shoulders, straight parallel lateral haft element edge. Haft element length at least 8 mm. (See Class 76).

N=11: six were made from local yellow chert; one was made from blue-gray Fort Payne chert; four were of local thermally altered chert.

Flaking is similar to Class 102. Eight have retouched blade margins, three of these are finely serrated. These same three have bases formed by cobble cortex. Two examples have been resharpened. Cross section is biconvex.

Class 104 (Fig. 26). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, straight horizontal shoulders, straight parallel lateral haft element edge.

N=5: one was made from blue Bangor chert; two were of local thermally altered chert.

Flaking is similar to Class 103 with secondary retouch present on all examples. Cross section is biconvex.

Class 105 (Fig. 26). Vertex Class 7, diagonally modified haft element, recurvate blade edges, excurvate base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=3: all were made of nonlocal Tallahatta quartzite.

Flaking is similar to Class 103. All examples were apparently resharpened. Cross section is biconvex.

Class 106 (Fig. 26). Vertex Class 5, diagonally modified haft element, straight blade edges, incurvate base, incurvate tapered shoulders, incurvate contracting lateral haft element edge.

N=1: this was made from nonlocal blue-gray Fort Payne chert.

Flaking is by broad percussion with a minimum of retouch. The proximal end of the haft along the basal edge is steeply beveled. A continuous line of retouch forms the lateral haft element edge. Cross section is flattened.

Class 107 (Fig. 26). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from local yellow chert.

Percussion flaking was used to make the blade and haft element. Retouch occurs on one example. Cross section is biconvex.

Class 108 (Fig. 26). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=5: two were made from local thermally altered chert; two were made from nonlocal blue-gray Fort Payne chert; one was of nonlocal Tallahatta quartzite.

Flaking is by percussion with retouch along the blade margins. Two examples have serrated blade margins. The base may be comprised of unmodified cortex or a transverse fracture. Cross section is biconvex.

Class 109 (Fig. 27). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight tapered shoulders, incurvate concave lateral haft element edge.

N=1: this was made from Tallahatta quartzite.

Flaking is by percussion. Cross section is biconvex.

Class 110 (Fig. 27). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate horizontal shoulders, incurvate concave lateral haft element edge.

N=5: four were made from local yellow chert; one was made from thermally altered Tuscaloosa formation-derived chert.

Flaking is by percussion with light percussion retouch along the blade margins. One example has deep hinge fracture terminations on the

blade surface. A transverse fracture forms the base on the thermally altered example. Cross section is biconvex.

Class 111 (Fig. 27). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=2: both were made from local yellow chert.

Flaking is similar to Class 110. Cross section is biconvex.

Class 112 (Fig. 27). Vertex Class 7, diagonally modified haft element, incurvate blade edges, straight base, incurvate tapered shoulders, incurvate contracting lateral haft element edge.

N=1: this was made from local thermally altered chert.

Percussion was used to form the blade and haft area with fine retouching along the blade margins. Cross section is biconvex.

Class 113 (Fig. 27). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate horizontal shoulders, incurvate concave lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from thermally altered Tuscaloosa formation-derived chert.

Broad non-patterned percussion forms the blade and haft element. Deep conchoidal flakes were removed from the haft area to form the horizontal shoulders and incurvate concave lateral haft element edge. Little secondary flaking occurs. Cross section is biconvex.

Class 114 (Fig. 27). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, straight parallel lateral haft element edge. Blades are no wider than 28 mm.

N=2: one was made of nonlocal Tallahatta quartzite; the other was of thermally altered Tuscaloosa formation-derived chert.

Flaking is by percussion with little retouching. The Tallahatta quartzite example has a base formed by transverse fracture. Cross section is biconvex.

Class 115 (Fig. 27). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from thermally altered Tuscaloosa formation-derived chert.

Broad percussion flaking was used to form the blade. One example was finely retouched by pressure flaking. Cross section is biconvex.

Class 116 (Fig. 27). Vertex Class 7, diagonally modified haft element, incurvate blade edges, straight base, incurvate barbed shoulders, straight expanding lateral haft element edge.

N=2: one was made of mottled blue-gray Fort Payne chert; the other was thermally altered Tuscaloosa formation-derived chert.

Flaking is by percussion with retouching on the blade margins. Deep conchoidal flakes have been diagonally notched into the distal end of the haft element to give the shoulders a barbed appearance. One example shows intensive resharpening and another moderate retouch. Cross section is biconvex.

Class 117 (Fig. 28). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, straight tapered shoulders, straight parallel lateral haft element edge.

N=5: one example was made from nonlocal Tallahatta quartzite; two were made from local thermally altered chert; one was made from local yellow chert; one was made of thermally altered Tuscaloosa formation-derived chert.

Flaking is by percussion with fine pressure retouch on the two examples with transversely fractured bases. One has been resharpened, resulting in steep alternate beveling. Two other examples have minimal retouching. Cross sections are all biconvex.

Class 118 (Fig. 28). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, straight parallel lateral haft element edge.

N=6: four were made from local thermally altered chert; two were made from thermally altered Tuscaloosa formation-derived chert.

Flaking is similar to Class 65. On four small examples there is fine retouch along the margin which presents a serrated appearance. One of these points has a base formed by cortical material. The larger examples are percussion flaked, and one is serrated. Cross section is biconvex.

Class 119 (Fig. 28). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate horizontal shoulders, straight parallel lateral haft element edge.

N=6: three were made from local thermally altered chert; three were made from thermally altered Tuscaloosa formation-derived chert.

The flaking on these specimens results in sinuous finely serrated blade edges. Cross section is biconvex.

Class 120 (Fig. 28). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight horizontal shoulders, straight contracting lateral haft element edge.

N=2: one example was large and was made from nonlocal Tallahatta quartzite; the other was smaller and was made from thermally altered Tuscaloosa formation-derived chert.

Percussion flaking was used. Each point was resharpened. Cross section is biconvex.

Class 121 (Fig. 28). Vertex Class 7, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, straight contracting lateral haft element edge.

N=6: two were made from local thermally altered chert; one was made from local yellow chert; one was chalcedony; two were made of thermally altered Tuscaloosa formation-derived chert.

Flaking is by broad percussion. Two examples exhibit extremely fine serration. Bases are formed by transverse fracture. Cross section is biconvex.

Class 122 (Fig. 29). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, straight contracting lateral haft element edge.

N=7: all were made from nonlocal Tallahatta quartzite.

Flaking is by broad percussion. There is some retouching on the blade margins. All have bases formed by a transverse fracture. Perhaps these are remnants of wide striking platforms. Cross section is biconvex.

Class 123 (Fig. 29). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=5: all were made from nonlocal Tallahatta quartzite.

Broad non-patterned flaking was used to make the blade and haft area. Retouch takes the form of resharpening. Cross section is biconvex.

Class 124 (Fig. 29). Vertex Class 5, diagonally modified haft element, incurvate blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=3: all were made from nonlocal Tallahatta quartzite.

Flaking is similar to Class 123. All of these have been resharpened, altering their blades considerably. Hinge fracture terminations occur

near the center of the blades. Cross section is biconvex; one example has a medial ridge on one surface.

Class 125 (Fig. 29). Vertex Class 5, diagonally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is similar to Classes 122-124. A single row of flake scars produces a slight side-notched appearance. Cross section is biconvex.

Class 126 (Fig. 29). Vertex Class 5, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, incurvate concave lateral haft element edge.

N=3: two were made from nonlocal Tallahatta quartzite; one was made from thermally altered Tuscaloosa formation-derived chert.

Flaking is similar to Class 122. There is a little retouch. One chert example has a base formed by a transverse fracture. Cross section is biconvex.

Class 127 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, excurvate convex lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is similar to Class 122. Hinge fractures are present along one blade margin and suggest resharpening. Cross section is biconvex.

Class 128 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate horizontal shoulders, straight parallel lateral haft element edge. Width-length ratio greater than or equal to 2:1 for haft element.

N=4: three were made from thermally altered Tuscaloosa formation-derived chert; the other was made from nonlocal Tallahatta quartzite.

Many have percussion retouch along the blade margins. One example has a beveled proximal haft section along the basal edge and fine pressure retouch along the blade margins. All specimens appear to have been resharpened. One has cortical material forming the base. Cross section is biconvex.

Class 129 (Fig. 30). Vertex Class 5, basally modified haft element, excurvate blade edges, excurvate base, straight barbed shoulders, no lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is by broad percussion with fine pressure retouch along the blade margins. A basal notched appearance is produced by several flakes having been removed from the basal plane. Cross section is flattened.

Class 130 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, recurvate base, incurvate horizontal shoulders, incurvate expanding lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from white quartzite.

Flaking is by broad non-patterned percussion. The basal edge of the haft element is thinned by percussion flaking. The basal notch on the quartzite artifact appears to have been produced by a single percussion blow. Retouch takes the form of resharpening. An impact fracture occurs on the chert example. Cross section is flattened on the chert example, and biconvex on the other.

Class 131 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, excurvate expanding lateral haft element edge.

N=1: this was made from gray Fort Payne chert.

Flaking is by percussion. Pressure retouch (resharpening) produces a serrated blade margin and a medial ridge. There are shallow side notches at the distal end of the haft element formed by deep conchoidal flake scars. Cross section is biconvex.

Class 132 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, straight horizontal shoulders, straight expanding lateral haft element edge.

N=1: this was made from pinkish-gray fossiliferous Bangor chert.

Flaking is by percussion. The retouched blade edge has a serrated appearance. Cross section is biconvex.

Class 133 (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, incurvate base, incurvate horizontal shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking is by percussion; retouch takes the form of resharpening. Alternate beveling occurs on the blade edges. Contiguous overlapping flake scars along the lateral haft element edge have produced a slight side-notched effect. Cross section is rhomboidal.

Class 134 (Fig. 30). Vertex Class 7, diagonally modified haft ele-

ment, straight blade edges, incurvate base, straight tapered shoulders, straight contracting lateral haft element edge.

N=1: this was made of local thermally altered chert.

Flaking is similar to Class 133. There is steep alternating pressure retouch which gives it a slightly serrated appearance. Cross section is rhomboidal.

<u>Class 135</u> (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, straight expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is by broad, shallow, non-patterned percussion. Pressure retouch forms steeply beveled blade edges and serrated margins. Percussion blows applied to the lateral haft element edges produced a notched appearance. Cross section is biconvex.

<u>Class 136</u> (Fig. 30). Vertex Class 7, diagonally modified haft element, recurvate blade edges, straight base, straight tapered shoulders, excurvate contracting lateral haft element edge.

N=1: this was made from local thermally altered chert.

The point was produced by broad, shallow percussion flaking. The blade margin has delicate pressure retouch. Broad, shallow, non-patterned flaking forms the blade and haft element. Cobble cortex appears on the base. Cross section is biconvex.

<u>Class 137</u> (Fig. 30). Vertex Class 7, diagonally modified haft element, excurvate blade edges, excurvate base, straight barbed shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

This point was produced by percussion flaking. Fine pressure retouch occurs on the blade margins, producing a serrated appearance. Alternate beveling, the result of resharpening the blade edges, produces a rhomboidal cross section.

<u>Class 138</u> (Fig. 30). Vertex Class 7, diagonally modified haft element, straight blade edges, excurvate base, incurvate barbed shoulders, incurvate concave lateral haft element edge.

N=2: both were made from local thermally altered chert.

Flaking on one is by broad, shallow percussion, with fine pressure retouch along the blade margins. Percussion blows struck diagonally to

the lateral haft element edge have produced a notched effect. Cross section is flattened. The other example was produced by percussion blows. One blade edge segment is beveled as a result of sharpening retouch. Cross section is biconvex.

Class 139 (Fig. 31). Vertex Class 7, diagonally modified haft element, straight blade edges, incurvate base, incurvate horizontal shoulders, straight expanding lateral haft element edge.

N=2: both were made of local thermally altered chert.

Flaking is by broad percussion with some pressure retouch. Cross section is biconvex.

Class 140 (Fig. 31). Vertex Class 7, diagonally modified haft element, straight blade edges, incurvate base, straight horizontal shoulders, recurvate expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Broad, shallow percussion flaking was used to form the blade and haft. The removal of deep conchoidal flakes by sharp percussion blows to the distal end of the lateral haft element margins produced the corner notches. Delicate pressure retouch along the blade margins produced serrated, slightly beveled edges. Cross section is flattened.

Class 141 (Fig. 31). Vertex Class 7, diagonally modified haft element, excurvate blade edges, incurvate base, incurvate tapered shoulders, straight expanding lateral haft element edge.

N=1: this was made from local yellow chert.

Broad, shallow flaking was used to form the blade and haft. Fine pressure retouch along the blade margins produced a slightly serrated appearance. Light percussion blows produced the corner notched effect. The haft area is thinned and the cross section is flattened.

Class 142 (Fig. 31). Vertex Class 7, diagonally modified haft element, straight blade edges, incurvate base, incurvate tapered shoulders, straight expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is similar to Class 141. In fact, this may be no more than a resharpened version of a Class 141 point. It has been thinned from the basal plane to the blade. Cross section is flattened.

Class 143 (Fig. 31). Vertex Class 5, laterally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=2: one was made of local thermally altered chert; the other was made of nonlocal Tallahatta quartzite.

Flaking is by broad, shallow percussion with fine pressure retouch used to produce a beveled blade on the Tallahatta quartzite example; this reduced the blade width, bringing it to a point tangent to the most lateral point of the haft element edge. The pressure flaking retouch produced a slight side-notched effect on this specimen and a sharply expanding haft on the other. Cross section is rhomboidal for the beveled point and flattened for the other.

Class 144 (Fig. 31). Vertex Class 5, diagonally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, excurvate expanding lateral haft element edge.

N=2: both were made from thermally altered Tuscaloosa formation-derived chert.

Flaking on one example is like that on the Tallahatta example in Class 143. Alternate beveling creates serrated blade edges and a rhomboidal cross section. The other example may be resharpened; it shows edge damage. Broad flaking is used on the blade and haft. Cross sectic is biconvex.

Class 145 (Fig. 31). Vertex Class 5, diagonally modified haft element, straight blade edges, excurvate base, incurvate tapered shoulders, excurvate expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is similar to Classes 143-144: retouching is common on blade margins. Percussion blows directed at the distal end of the haft in combination with the resharpened blade edges produced a side notched effect. Cross section is biconvex.

Class 146 (Fig. 31). Vertex Class 5, laterally modified haft element, straight blade edges, straight base, incurvate tapered shoulders, straight expanding lateral haft element edge.

N=3: two were made from local thermally altered chert; one was made from blue-gray Fort Payne chert.

The flaking is similar to Classes 143-144. Pressure retouch was used to produce serrated blade margins. This procedure brought the most lateral point on the haft element in line with the maximum extent of the blade margin. Light percussion blows produced a side notched appearance. Cross section is biconvex.

Class 147 (Fig. 31). Vertex Class 5, diagonally modified haft element, straight blade edges, incurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=1: this was made from gray Fort Payne chert.

Flaking is by broad percussion, with fine pressure retouch used to resharpen the blade margins. The proximal portion of the haft element is steeply beveled. The incurvate base is formed by a series of flake scars. Notches along the lateral haft element edges were formed by a series of percussion strokes. Cross section is flattened.

Class 148 (Fig. 31). Vertex Class 9, laterally modified haft element, straight blade edges, recurvate base, straight tapered shoulders, angular expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

The flaking is broad non-patterned percussion with bifacial retouch along the blade margins. This produced a steep alternately beveled blade. Deep conchoidal flake scars give the notched appearance. Cross section is rhomboidal.

Class 149 (Fig. 31). Vertex Class 7, diagonally modified haft element, straight blade edges, recurvate base, straight tapered shoulders, straight expanding lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made from white quartzite.

A recurvate basal edge and expanding haft forms the proximal portion of the point with the larger example being resharpened and the blade edges serrated. One example is flattened in cross section; the other is biconvex.

Class 150 (Fig. 31). Vertex Class 7, diagonally modified haft element, incurvate blade edges, recurvate base, incurvate tapered shoulders, straight expanding lateral haft element edge.

N=1: this was made from local thermally altered chert.

Flaking is by random percussion with pressure retouch along the blade margins. Diagonally placed percussion blows give a notched appearance to the haft area.

Class 151 (Fig. 31). Vertex Class 9, diagonally modified haft element, straight blade edges, straight base, straight tapered shoulders, angular expanding lateral haft element edge.

N=1: this was made from nonlocal Tallahatta quartzite.

Flaking was by broad percussion with retouch along the blade margins. The notches are formed by deep conchoidal flake scars. The base is thinned and the cross section is biconvex.

Class 152 (Fig. 32). Vertex Class 7, laterally modified haft element, straight blade edges, straight base, straight tapered shoulders, angular expanding lateral haft element edge.

N=1: this was made from gray Fort Payne chert.

Flaking was by random percussion with some pressure retouch along blade margins. The small notches were formed by the removal of two flakes from platforms on opposite sides of the distal lateral haft element margins. Cross section is biconvex.

Class 153 (Fig. 32). Vertex Class 7, laterally modified haft element, excurvate blade edges, straight base, incurvate tapered shoulders, angular expanding lateral haft element edge.

N=2: one was made from local thermally altered chert; the other was made of white quartzite.

Broad non-patterned percussion was used to shape the blade and haft. The side notches were formed by deep flake scars originating from opposing platforms. The base of the quartzite point was formed by a transverse fracture. The chert point has retouched blade edges which look slightly serrated. It may have been resharpened. Cross section is biconvex.

Class 154 (Fig. 32). Vertex Class 9, laterally modified haft element, excurvate blade edges, incurvate base, incurvate tapered shoulders, angular expanding lateral haft element edge.

N=2: one was made from local yellow chert; the other was made of local thermally altered chert.

Flaking is the same as Class 153. There is fine pressure retouch along blade margins. The side notches are formed by deep conchoidal flake scars originating from opposing platforms. The proximal end of the haft element is thinned. Cross section is biconvex.

Class 155 (Fig. 32). Vertex Class 5, laterally modified haft element, straight blade edges, recurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=3: two were made from local yellow chert (which may have been thermally altered); the other is from an unidentifiable patinated chert.

Broad, shallow percussion flaking (soft hammer?) was used to form the blade and haft. The blade edges are heavily serrated. These points appear to be resharpened Class 141 points. The proximal portion of the haft element has been thinned with several flakes which originated at the base extending well into the blade. Cross section is flattened on these two examples. The other specimen has broad shallow side notches formed by a continuous line of percussion scars. This specimen is slightly beveled due to the fine pressure retouching along the blade margins. Cross

section is biconvex.

Class 156 (Fig. 32). Vertex Class 5, laterally modified haft element, incurvate blade edges, recurvate base, incurvate tapered shoulders, straight expanding lateral haft element edges.

N=1: this was made from nonlocal blue-gray Fort Payne chert.

Flaking is similar to Class 148. Resharpening has produced steep alternately beveled blade edges. The point has a slightly serrated appearance and the proximal end of the haft area is thinned with flake scars extending into the proximal blade area. Cross section is rhomboidal.

Class 157 (Fig. 32). Vertex Class 5, laterally modified haft element, excurvate blade edges, recurvate base, incurvate tapered shoulders, incurvate expanding lateral haft element edge.

N=2: both were made from Tuscaloosa formation-derived chert.

Broad, shallow, non-patterned flaking (soft hammer?) was used to produce the blade and haft. Very wide shallow thinning flakes were removed from both surfaces of the haft area. Fine retouching along the blade margins produced a serrated appearance. These may be early stage Class 155 points. The points are similar, but these have excurvate blade edges. Cross section is flattened.

Class 158 (Fig. 32). Vertex Class 5, laterally modified haft element, recurvate blade edges, incurvate base, no shoulders, incurvate expanding lateral haft element edge.

N=2: both were made from local yellow chert. A somewhat glossy surface suggests that there may have been some thermal alteration.

Flaking is by shallow non-patterned percussion, with finely pressure retouched blade margins. The resharpened blade edges have an exaggerated serrated look. The haft element has been well thinned on both surfaces. Flake scars originating at the basal plane travel distally across the haft and in one case extend half the length of the blade. Cross section is flattened.

Class 159 (Fig. 32). Vertex Class 5, laterally modified haft element, straight blade edges, incurvate base, no shoulders, incurvate expanding lateral haft element edge.

N=3: two were made from local thermally altered chert; the other was made from local yellow chert, which may have been heated.

Flaking is similar to Classes 158 and 160. One specimen has a slightly beveled blade edge. Cross section is flattened.

Class 160 (Fig. 32). Vertex Class 5, laterally modified haft element, straight blade edges, incurvate base, no shoulder, straight expanding lateral haft element edge.

N=2: both were made from local yellow chert, which may have been thermally altered.

Flaking procedures are similar to those of Classes 158-159. They were extensively resharpened. Cross section is flattened.

Class 161 (Fig. 33). Vertex Class 3, no lateral haft element modification, excurvate blade edges, angular internal base, no shoulder, no lateral haft element edge.

N=1: this was made from local yellow chert.

Flaking is by crude percussion with one blade margin slightly retouched. One surface of the blade was damaged; only a small portion near the blade edge remains. One large thinning flake originates at the apex of the angular base and extends distally for about a centimeter. Cross section is flattened.

Class 162 (Fig. 33). Vertex Class 3, no lateral haft edge modification, recurvate blade edges, recurvate base, no shoulder, no lateral haft element edge. At least 50 mm in length.

N=1: this was made from local yellow chert.

Flaking is horizontally transverse with secondary retouch exhibited on the blade margins and the basal edge, which is thinned. Cross section is flattened.

Class 163 (Fig. 33). Vertex Class 3, no lateral haft element modification, excurvate blade edges, incurvate base, no shoulder, no lateral haft element edge. At least 50 mm in length.

N=2: one example was made from what seems to be a black nonlocal coastal plain agate; the other was made from nonlocal Tallahatta quartzite.

Primary flaking of the agate specimen was by percussion; the blade margins were retouched using light percussion. A long narrow flake scar originating at the basal edge extends distally about 2.5 cm. The basal and distal blade portions of the Tallahatta example are damaged. This point is fluted on both surfaces; the flutes originate at the base. These flutes are between 15 and 18 mm wide. The cross sections of both points are biconvex.

Classes 164 to 171 are not point classes proper, but the residue culled from the sorting process. These are the untidy remains of any classification: fragments and broken bits and pieces, which otherwise would find a place in a 'whole point' class. These were subjectively

separated by size into 'projectile' points and 'arrow' points; both weight and length were used as sorting criteria.

Class 164 (Fig. 33). Parts of broken, reworked, and otherwise undifferentiated projectile points. N=42.

Class 165 (Fig. 33). Proximal projectile point fragments. The broken off proximal portion of projectile points. N=37.

Class 166 (Fig. 33). Medial projectile point fragments. The broken out medial section of projectile points. N=18.

Class 167 (Fig. 33). Distal projectile point fragments. Broken off distal portion of projectile points. N=87.

Class 168 (Fig. 33). Parts of broken, reworked and otherwise undifferentiated 'arrow' points. N=124.

Class 169 (Fig. 33). Proximal 'arrow' point fragments. The broken off proximal portion of 'arrow' points. N=33.

Class 170 (Fig. 33). Medial 'arrow' point fragments. The broken off medial section of 'arrow' points. N=34.

Class 171 (Fig. 33). Distal 'arrow' point fragments. The broken off distal portion of 'arrow' points. N=238.

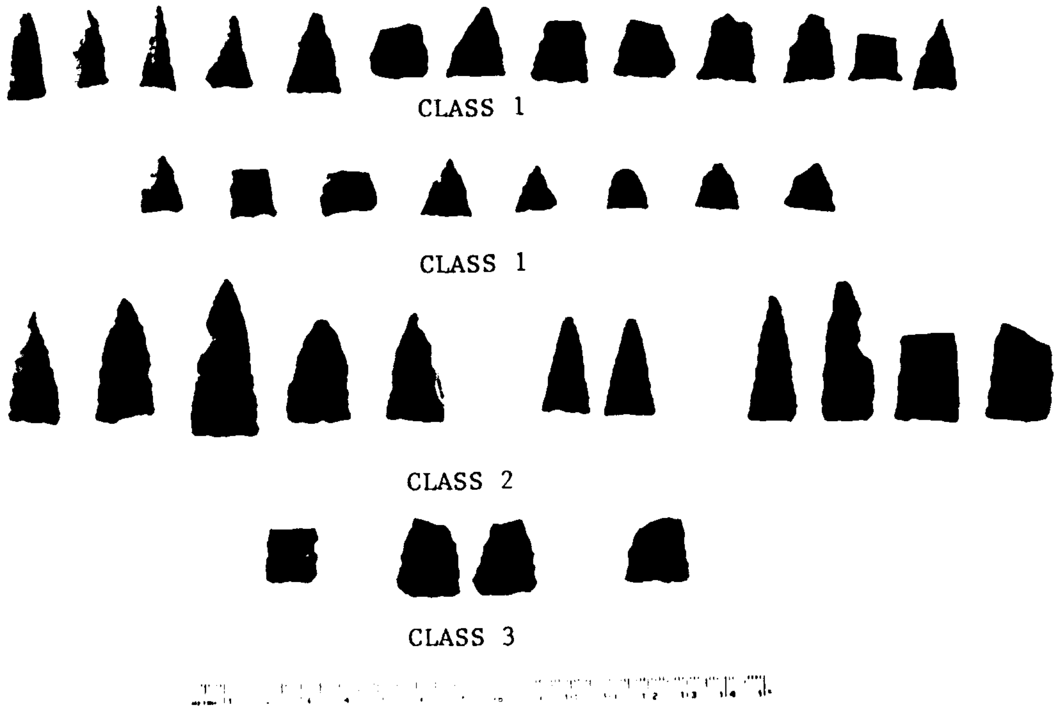

Figure 11. Point Classes. Class 1, Row 1 (Site 1Gr1x1); Class 1, Row 2 (Site 1Gr1x1); Class 2, Row 3 (1-5, Site 1Pi61; 6-7, Site 1Gr2; 8, Site 1Pi15; 9, Site 1Pi6;10-11, Site 1Pi14); Class 3, Row 4 (1, Site 1Gr2; 2-3, Sites 1Gr1; 4, Site 1Gr5).

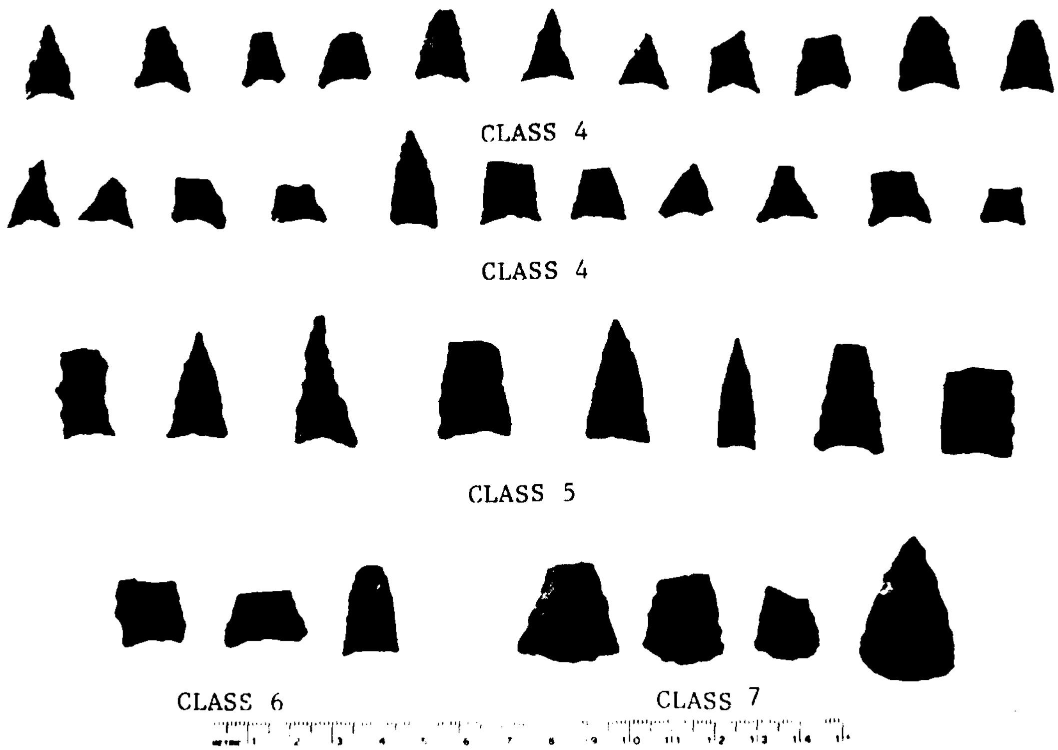

Figure 12. Point Classes. Class 4, Row 1 (Site 1Gr1x1); Class 4, Row 2 (Site 1Gr1x1); Class 5, Row 3 (1, Site 1Pi34; 2, Site 1Gr2; 3-8, Site 1Pi61); Class 6, Row 4 (1-3, Site 1Pi61); Class 7, Row 4 (4-6, Site 1Pi61; 7, Site 1Gr1x1).

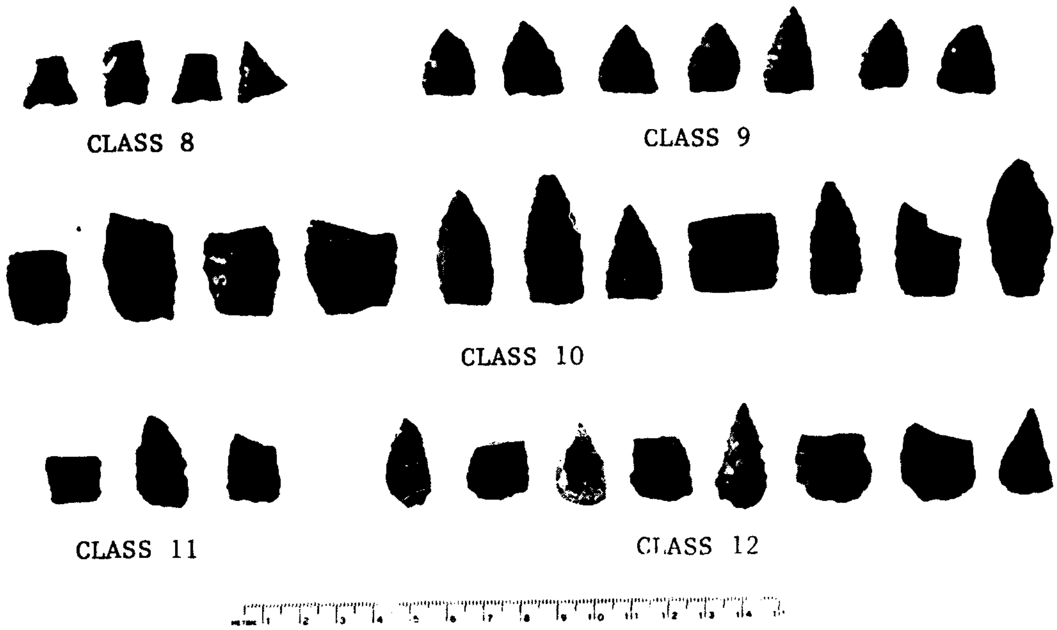

Figure 13. Point Classes. Class 8, Row 1 (1-3, Site 1Grlxl; 4, Site 1Gr2); Class 9, Row 1 (5-10, Site 1Pi61; 11, Site 1Pi18); Class 10, Row 2 (1-11, Site 1Pi61); Class 11, Row 3 (1-2, Site 1Pi61; 3, Site 1Gr2); Class 12, Row 3 (4-11, Site 1Pi61).

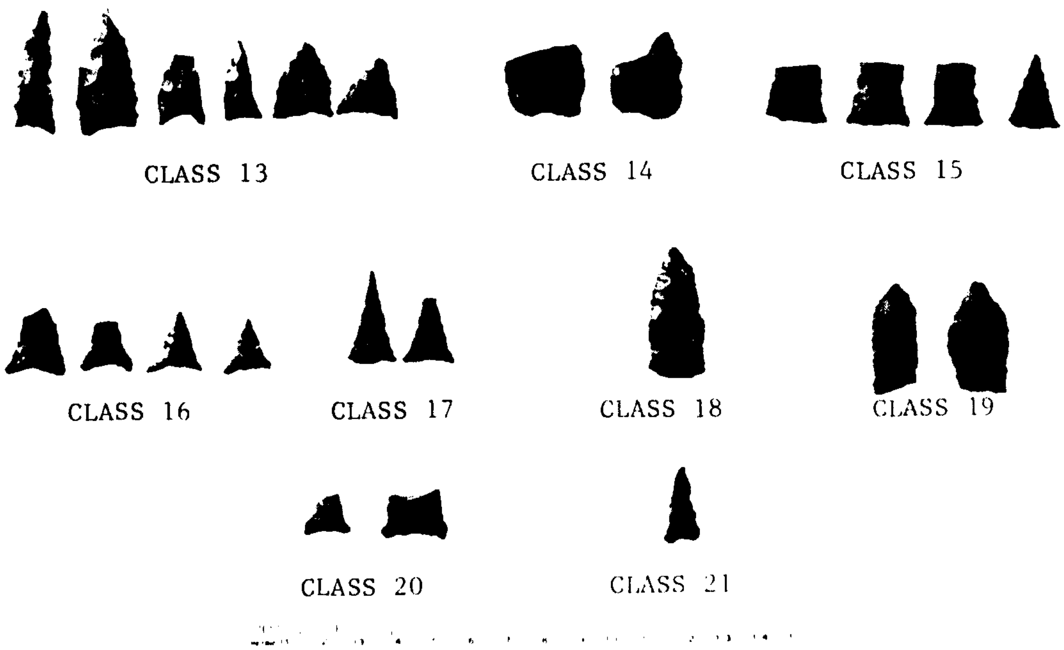

Figure 14. Point Classes. Class 13, Row 1 (1-6, Site 1Grlxl); Class 14, Row 1 (7, Site 1Pi61; 8, Site 1Pi4); Class 15, Row 1 (9-10, Site 1Pi61; 11-12, Site 1Gr2); Class 16, Row 2 (1-3, Site 1Grlxl; 4, Site 1Gr9); Class 17, Row 2 (5-6, Site 1Gr2); Class 18, Row 2 (7, Site 1Gr2); Class 19, Row 2 (8-9, Site 1Pi61); Class 20, Row 3 (1, Site 1Grlxl; 2, Site 1Pi33); Class 21, Row 3 (3, Site 1Grlxl).

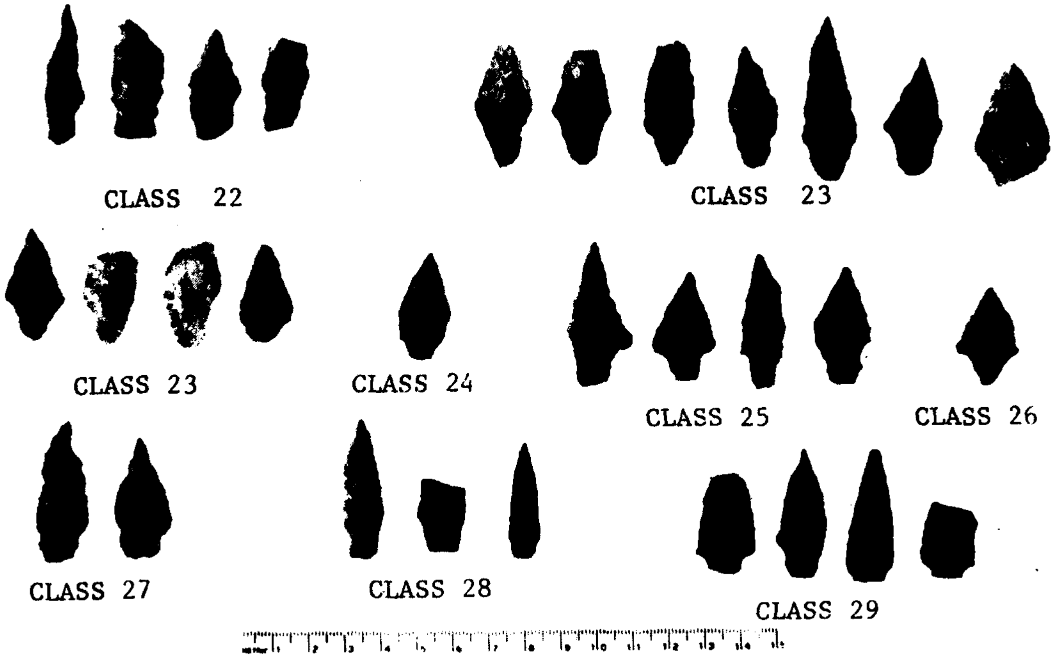

Figure 15. Point Classes. Class 22, Row 1 (1, Site 1Gr1x1; 2, Site 1Gr2; 3, Site 1Pi38; 4, Site 1Pi61); Class 23, Row 1 (5–11, Site 1Gr2); Class 23, Row 2 (1–4, Site 1Gr2); Class 24, Row 2 (5, Site 1Gr2); Class 25, Row 2 (6–9, Site 1Gr2), Class 26, Row 2 (10, Site 1Gr2); Class 27, Row 3 (1–2, Site 1Gr2); Class 28, Row 3 (3–4, Site 1Gr2; 5, Site 1Pi61); Class 29, Row 3 (6–8, Site 1Gr2; 9, Site 1Pi61).

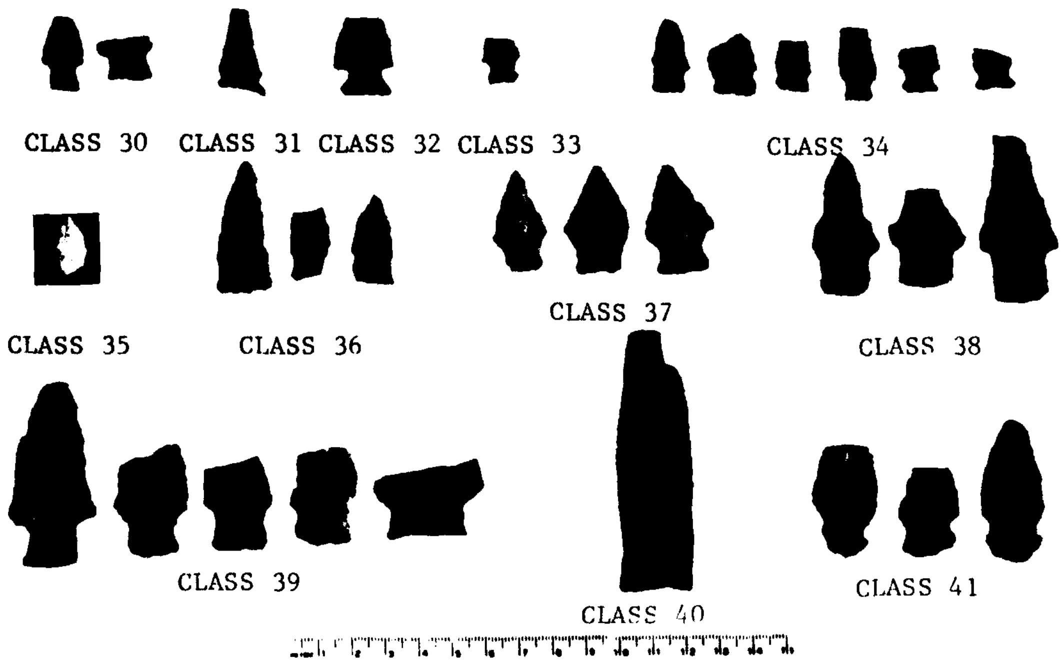

Figure 16. Point Classes. Class 30, Row 1 (1, Site 1Pi33; 2, Site 1Pi65); Class 31, Row 1 (3, Site 1Gr2); Class 32, Row 1 (4, Site 1Pi61); Class 33, Row 1 (5, Site 1Gr1x1); Class 34, Row 1 (6, Site 1Pi61; 7, Site 1Gr1x1; 8–9, Site 1Pi61; 10, Site 1Gr2; 11, Site 1Pi33); Class 35, Row 2 (1, 1Pi61); Class 36, Row 2 (2, Site 1Pi14; 3, Site 1Pi61; 4, Site 1Pi13); Class 37, Row 2 (5, Site 1Gr1x1; 6, Site 1Pi37; 7, Site 1Gr50); Class 38, Row 2 (8–10, Site 1Gr2); Class 39, Row 3 (1, Site 1Gr2; 2, Site 1Gr1x1; 3–5, Site 1Pi61); Class 40, Row 3 (6, Site 1Gr2); Class 41, Row 3 (7, Site 1Gr9; 8, Site 1Pi61; 9, Site 1Gr2).

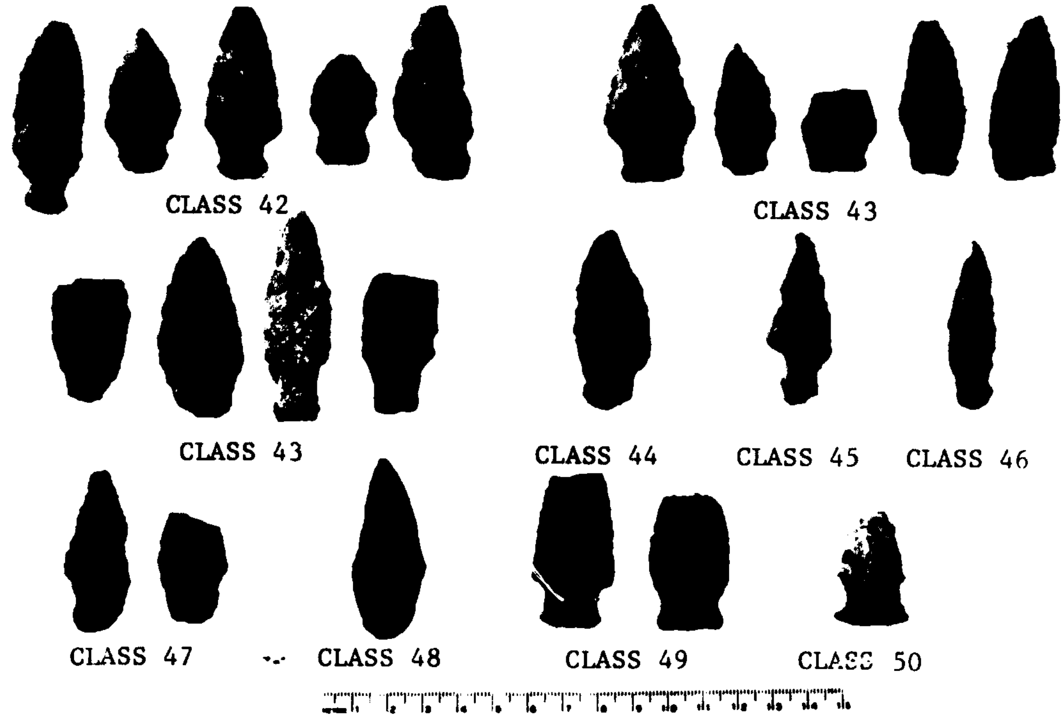

Figure 17. Point Classes. Class 42, Row 1 (1-3, Site 1Gr2; 4-5, Site 1Pi161); Class 43, Row 1 (6-8, Site 1Gr1x1; 9, Site 1Gr2; 10, Site 1Pi88); Class 43, Row 2 (1, Site 1Pi88; 2-4, Site 1Pi61); Class 44, Row 2 (5, Site 1Pi88); Class 45, Row 2 (6, Site 1Su1); Class 46, Row 2 (7, Site 1Gr5); Class 47, Row 3 (1, Site 1Gr2; 2, Site 1Gr1x1); Class 48, Row 3 (3, Site 1Pi61); Class 49, Row 3 (4, Site 1Pi14; 5, Site 1Gr50); Class 50, Row 3 (6, Site 1Pi14).

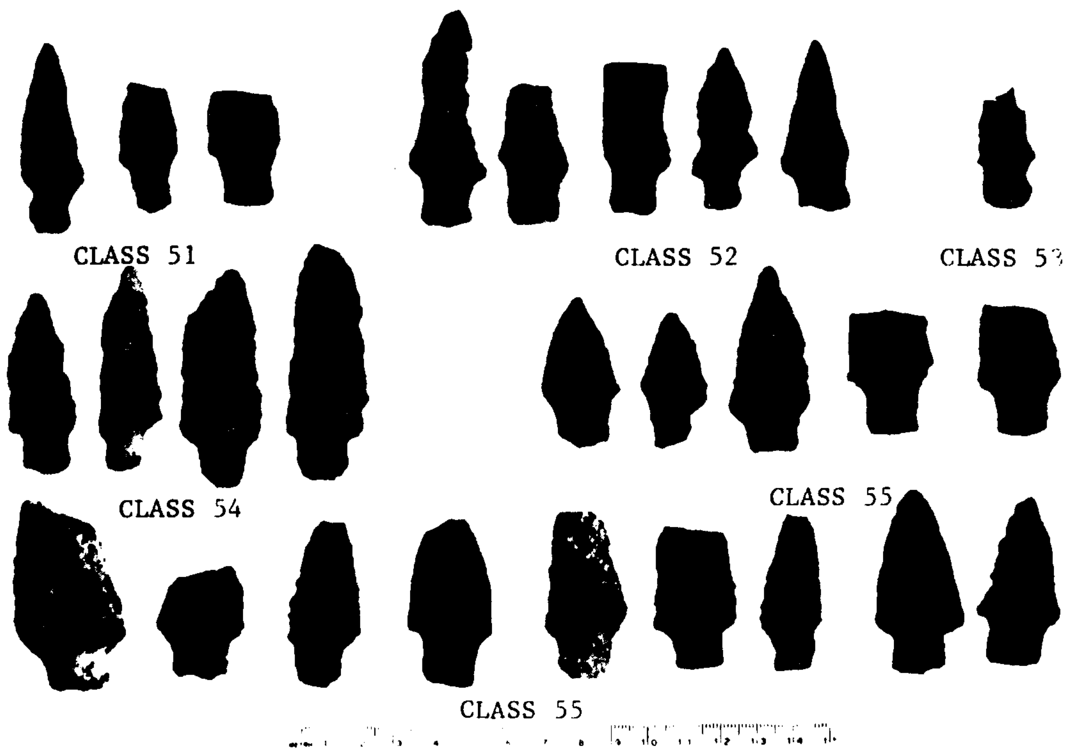

Figure 18. Point Classes. Class 51, Row 1 (1-2, Site 1Pi61; 3, Site 1Gr2); Class 52, Row 1 (4-5, Site 1Gr2; 6, Site 1Gr1x1; 7-8, Site 1Pi61); Class 53, Row 1 (9, Site 1Pi61); Class 54, Row 2 (1, Site 1Pi61; 2-3, Site 1Gr1x1; 4, Site 1Gr2); Class 55, Row 2 (5-9, Site 1Gr2); Class 55, Row 3 (1, Site 1Pi61; 2, Site 1Gr50; 3-6, Site 1Gr1x1; 7, Site 1Pi8; 8, Site 1Pi67; 9, Site 1Pi88).

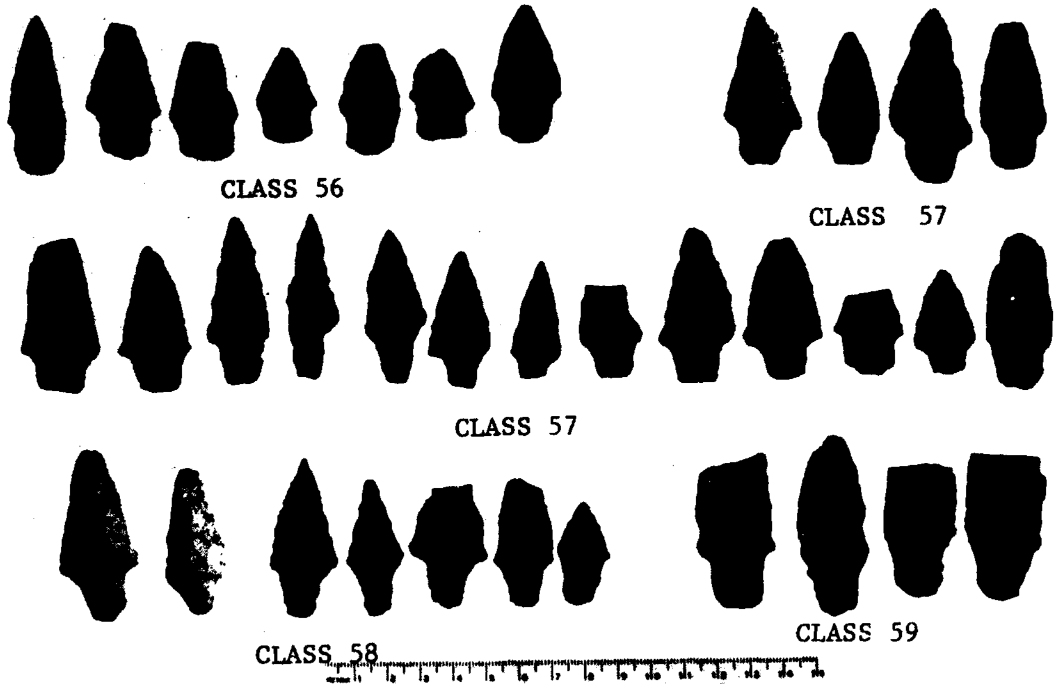

Figure 19. Point Classes. Class 56, Row 1 (1-3, Site 1Gr1x1; 4, Site 1Gr2; 5-7, Site 1Pi61); Class 57, Row 1 (8-9, Site 1Pi61; 10-11, Site 1Gr2); Class 57, Row 2 (1-7, Site 1Gr2; 8, Site 1Pi33; 9-11 Site 1Pi61; 12, Site 1Pi65; 13, Site 1Su1); Class 58, Row 3 (1-2, Site 1Gr1x1; 3-5, Site 1Gr2; 6, Site 1Gr50; 7, Site 1Pi61); Class 59, Row 3 (8-10, Site 1Gr1x1; 11, Site 1Pi61).

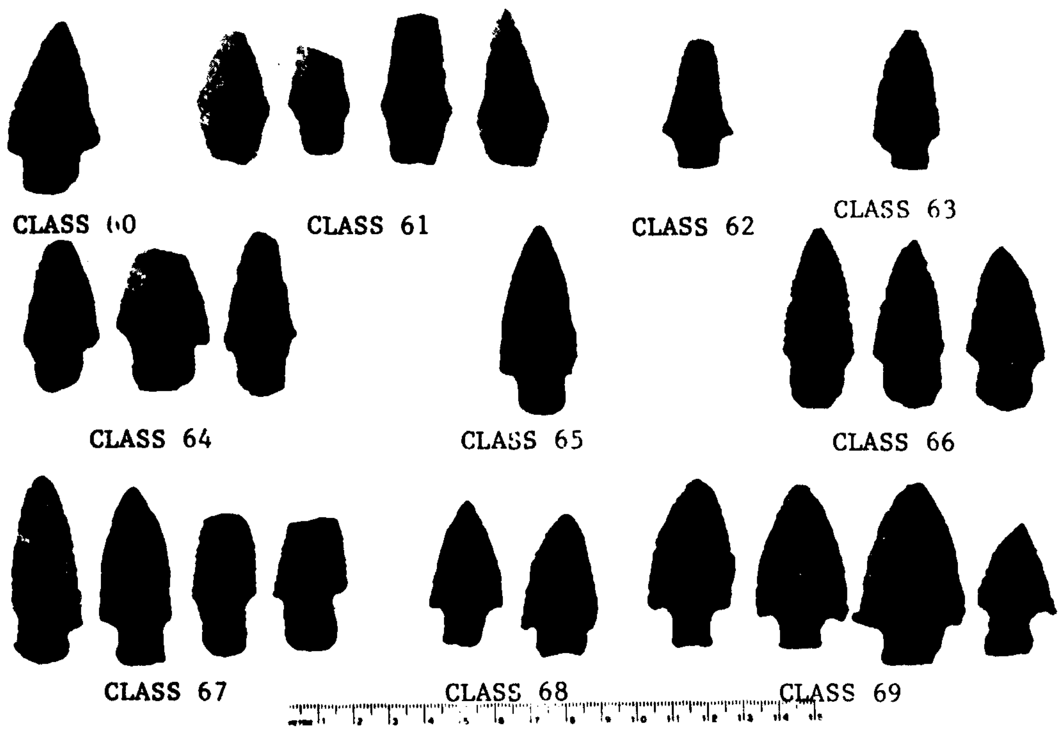

Figure 20. Point Classes. Class 60, Row 1 (1, Site 1Gr2); Class 61, Row 1 (2-4, Site 1Gr2; 5, Site 1Pi61); Class 62, Row 1 (6, Site 1Pi88); Class 63, Row 1 (7, Site 1Pi81); Class 64, Row 2 (1-3, Site 1Gr2); Class 65, Row 2 (4, Site 1Gr1x1); Class 66, Row 2 (5, Site 1Gr2; 6, Site 1Pi61; 7, Site 1Pi64); Class 67, Row 3 (1, Site 1Gr2; 2-4 Site 1Pi65); Class 68, Row 3 (5, Site 1Pi61; 6, Site 1Gr2); Class 69, Row 3 (7, Site 1Gl x1; 8, Site 1Gr2; 9, Site 1Pi61; 10, Site 1Pi65).

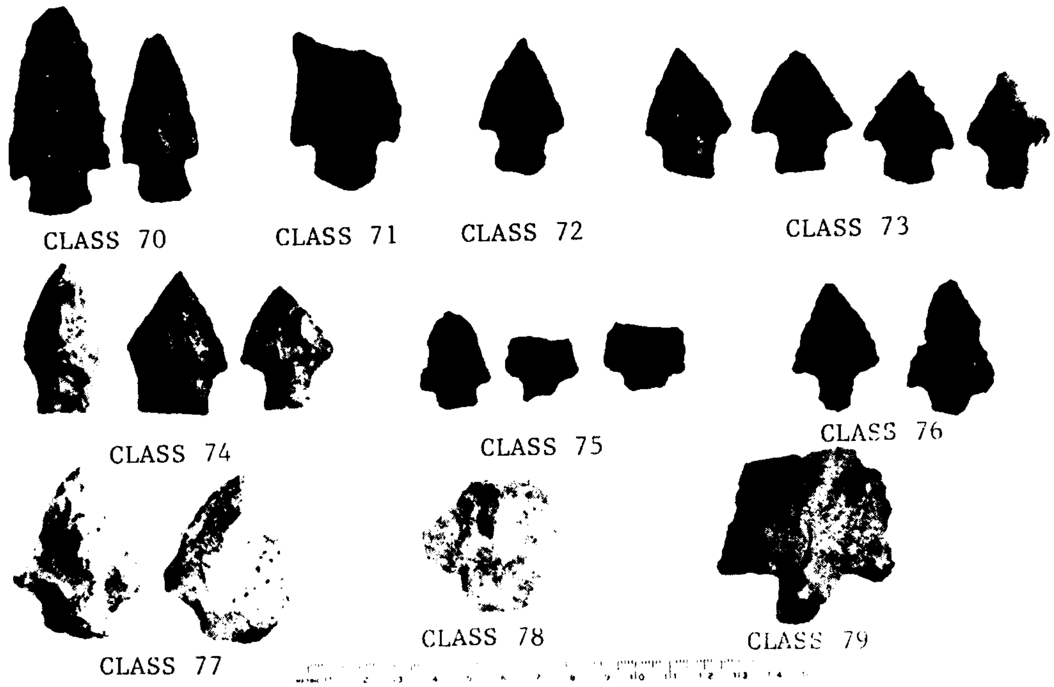

Figure 21. Point Classes. Class 70, Row 1 (1, Site 1Gr2; 2, Site 1Gr1x1); Class 71, Row 1 (3, Site 1Pi61); Class 72, Row 1 (4, Site 1Pi65); Class 73, Row 1 (5, Site 1Gr1x1; 6, Site 1Pi61; 7, Site 1Pi65; 8, Site 1Gr2); Class 74, Row 2 (1-3, Site 1Gr50); Class 75, Row 2 (4, Site 1Gr1x1; 5-6, Site 1Pi61); Class 76, Row 2 (7-8, Site 1Gr2); Class 77, Row 3 (1, Site 1Gr1x1; 2, Site 1Gr2; Class 78, Row 3 (3, Site 1Gr2); Class 79, Row 3 (4, Site 1Gr2).

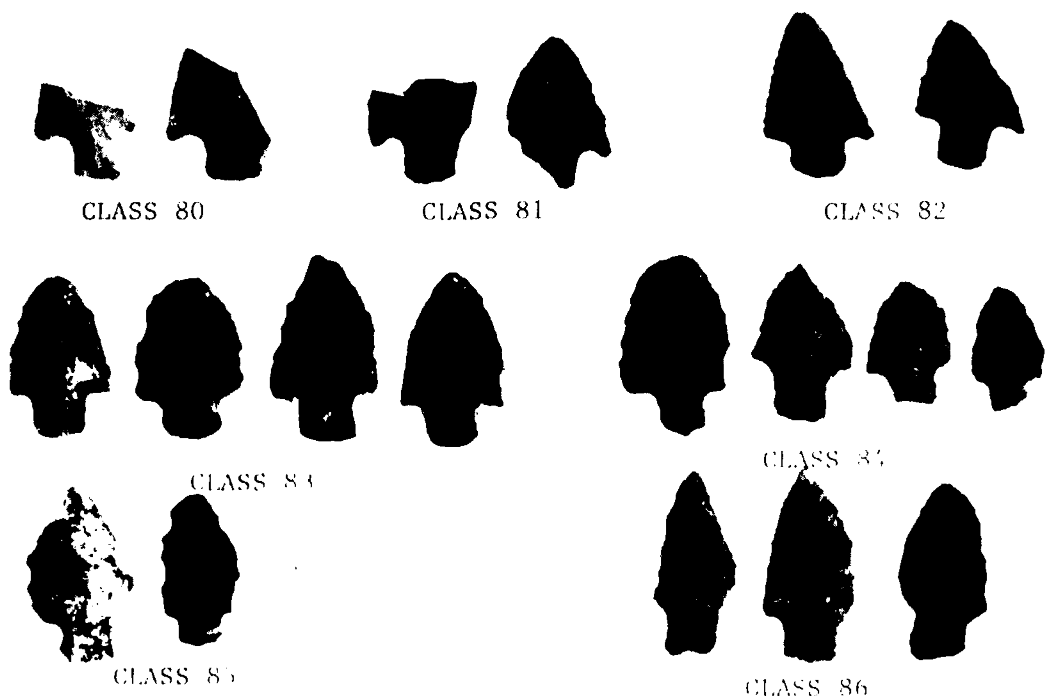

Figure 22. Point Classes. Class 80, Row 1 (1, Site 1Gr2; 2, Site 1Pi61); Class 81, Row 1 (3, Site 1Pi33; 4, Site 1Gr2); Class 82, Row 1 (5, Site 1Gr2; 6, Site 1Gr1x1); Class 83, Row 2 (1-2, Site 1Gr2; 3, Site 1Gr1x1; 4, Site 1Pi18); Class 84, Row 2 (5-7, Site 1Pi61; 8, Site 1Gr1x1); Class 85, Row 3 (1-2, Site 1Pi61; 3, Site 1Gr2); Class 86, Row 3 (4-5, Site 1Gr2; 6, Site 1Pi61).

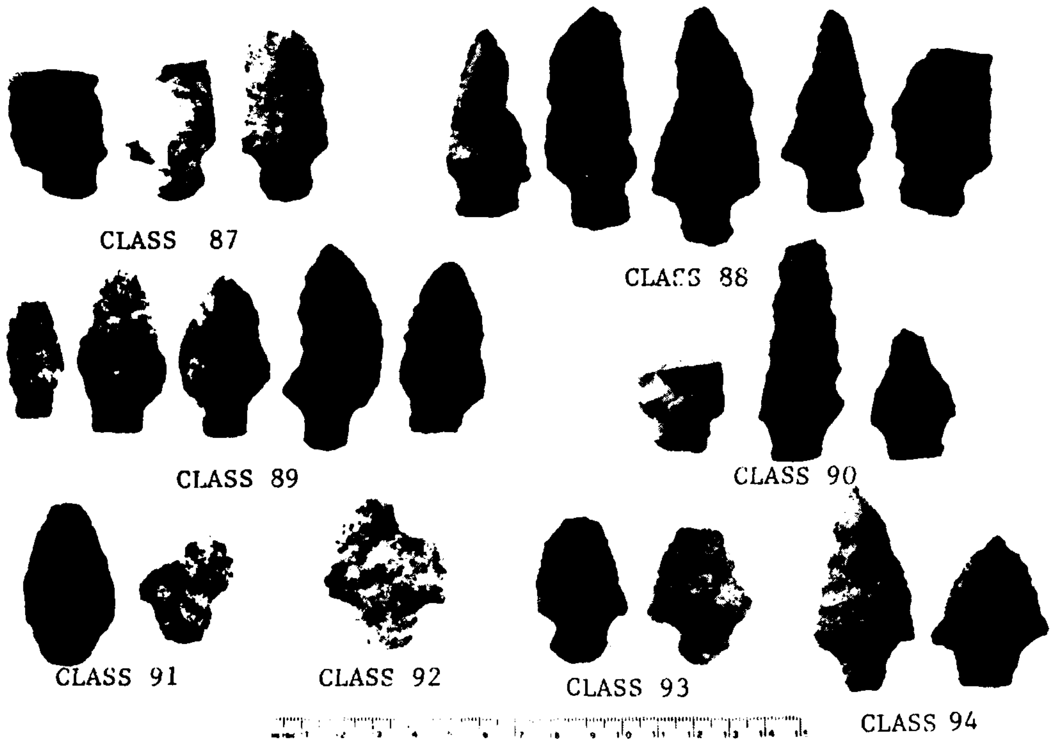

Figure 23. Point Classes. Class 87, Row 1 (1, Site 1Pi65; 2, Site 1Pi61; 3, Site 1Gr2); Class 88, Row 1 (4, Site 1Pi33; 5-7, Site 1Gr2; 8, Site 1Pi16); Class 89, Row 2 (1-2, Site 1Gr2; 3-4, Site 1Pi61; 5, Site 1Gr1x1); Class 90, Row 2 (6, Site 1Gr1x1; 7, Site 1Pi61; 8, Site 1Pi65); Class 91, Row 3 (1, Site 1Gr2; 2, Site 1Pi61); Class 92, Row 3 (3, Site 1Pi61); Class 93, Row 3 (4, Site 1Pi61; 5, Site 1Gr2); Class 94, Row 3 (6, Site 1Gr2; 7, Site 1Pi61).

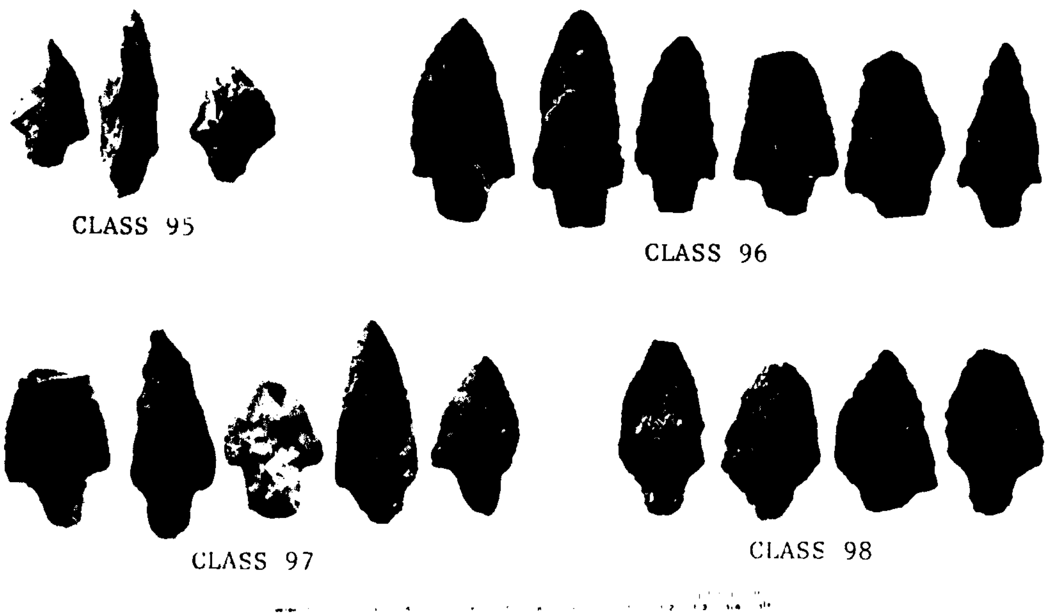

Figure 24. Point Classes. Class 95, Row 1 (1-2, Site 1Gr1x1; 3, Site 1Pi61); Class 96, Row 1 (4-6, Site 1Gr2; 7-9, Site 1Pi61); Class 97, Row 2 (1, Site 1Pi8; 2-3, Site 1Pi61; 4, Site 1Gr1x1; 5, Site 1Pi33); Class 98, Row 2 (6-8, Site 1Gr2; 9, Site 1Gr1x1).

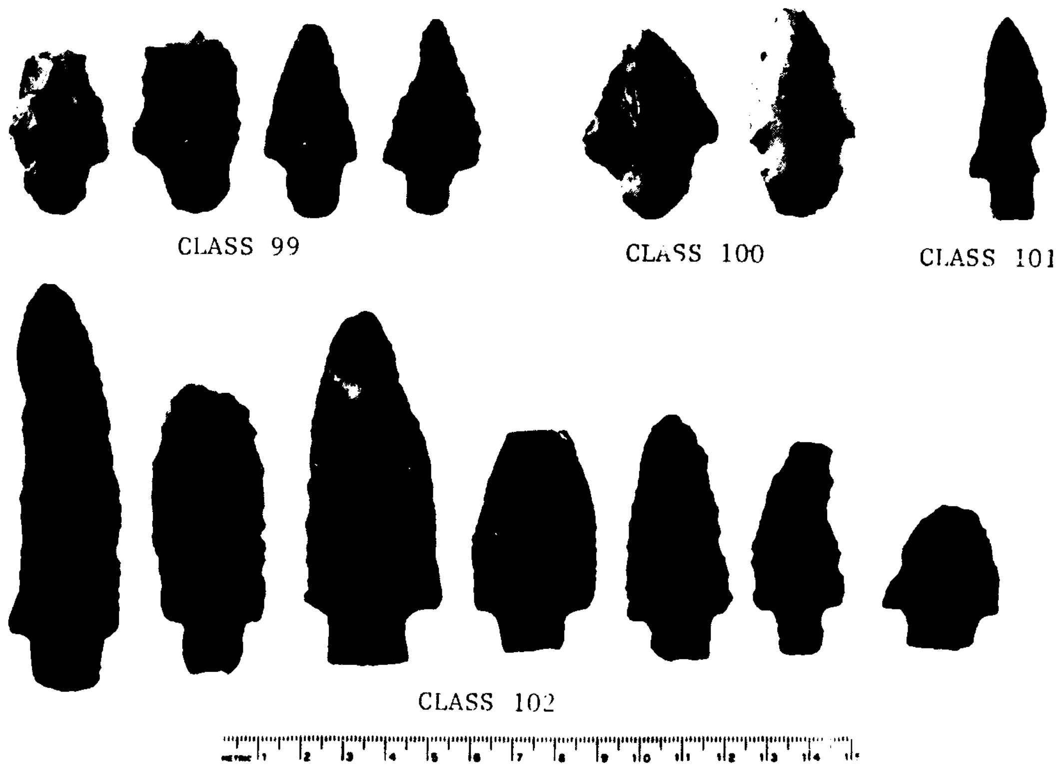

Figure 25. Point Classes. Class 99, Row 1 (1, Site 1Pi33; 2-4, Site 1Gr2); Class 100, Row 1 (5, Site 1Su1; 6, Site 1Gr1x1); Class 101, Row 1 (7, Site 1Pi33); Class 102, Row 2 (1-4, Site 1Gr2; 5, Site 1Pi61; 6, Site 1Gr2; 7, Site 1Gr1x1).

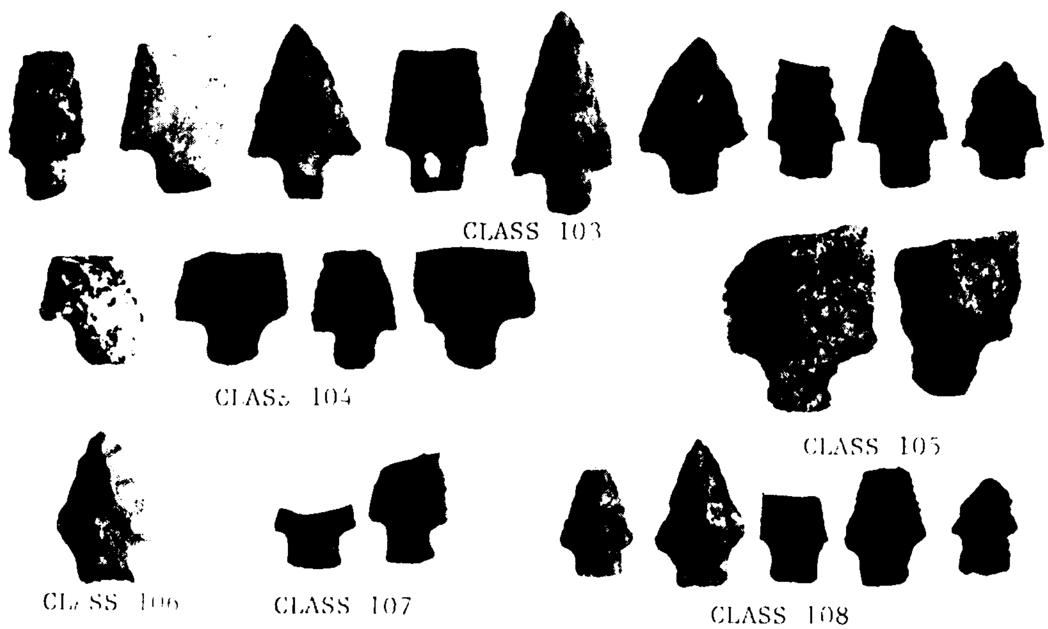

Figure 26. Point Classes. Class 103, Row 1 (1-7, Site 1Gr2; 8, Site 1Gr1x1; 9, Site 1Pi33); Class 104, Row 2 (1-2, Site 1Gr2; 3, Site 1Pi61; 4, Site 1Pi64); Class 105, Row 2 (5, Site 1Pi65; 6, Site 1Gr1x1); Class 106, Row 3 (1, Site 1Su1); Class 107, Row 3 (2, Site 1Gr1x1; 3, Site 1Pi61); Class 108, Row 3 (4, Site 1Su1; 5-7, Site 1Gr1x1; 8, Site 1Pi61).

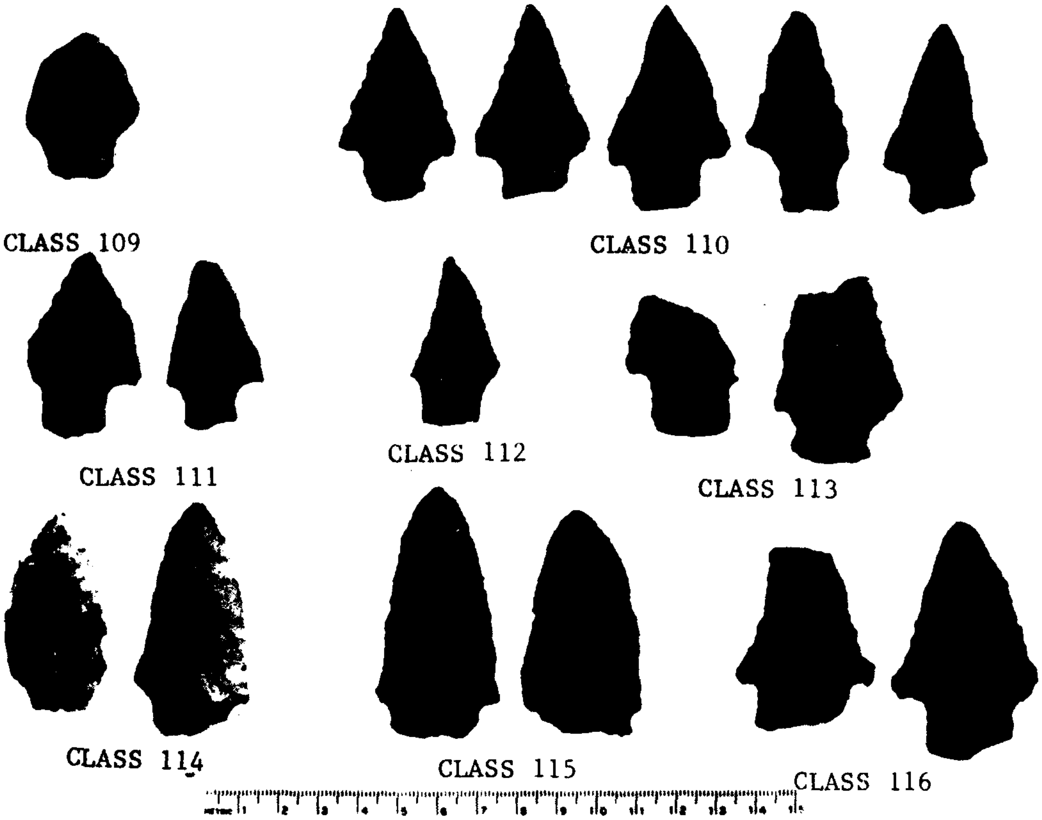

Figure 27. Point Classes. Class 109, Row 1 (1, Site 1Pi61); Class 110, Row 1 (2, Site 1Gr37; 3-4, Site 1Pi61; 5, Site 1Gr2; 6, Site 1Gr1x1); Class 111, Row 2 (1-2, Site 1Pi33); Class 112, Row 2 (3, Site 1Gr2), Class 113, Row 2 (4-5, Site 1Pi61); Class 114, Row 3 (1, Site 1Gr2; 2, Site 1Pi61); Class 115, Row 3 (3, Site 1Pi61; 4, Site 1Pi8); Class 116, Row 3 (5, Site 1Pi61; 6, Site 1Pi65).

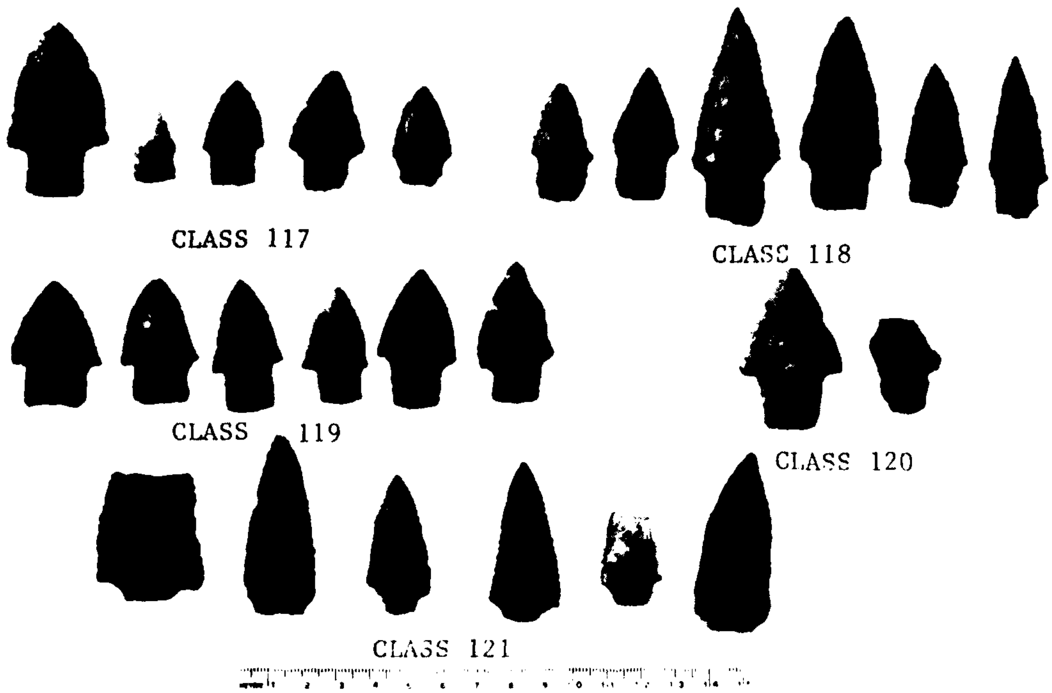

Figure 28. Point Classes. Class 117, Row 1 (1-2, Site 1Gr1x1; 3-4, Site 1Gr2; 5, Site 1Pi13); Class 118, Row 1 (6-8, Site 1Gr2, 9-11, Site 1Gr1x1); Class 119, Row 2 (1-4, Site 1Gr2; 5, Site 1Gr1x1; 6, Site 1Pi61); Class 120, Row 2 (7-8, Site 1Gr1x1); Class 121, Row 3 (1-5, Site 1Gr2; 6, Site 1Pi61).

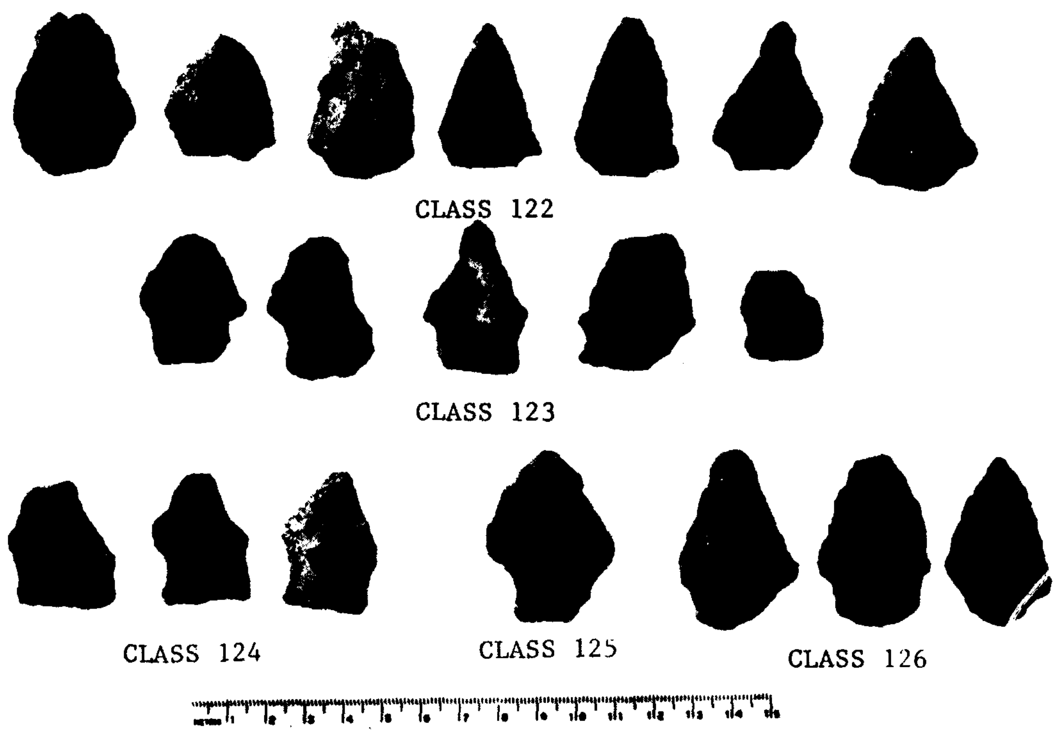

Figure 29. Point Classes. Class 122, Row 1 (1-3, Site 1Pi61; 4-5, Site 1Gr2; 6-7, Site 1Gr1x1); Class 123, Row 2 (1-2, Site 1Pi61; 3-4, Site 1Gr1x1; 5, Site 1Gr2); Class 124, Row 3 (1-3, Site 1Pi61); Class 125, Row 3 (4, Site 1Pi61); Class 126, Row 3 (5, Site 1Gr2; 6-7, Site 1Pi61).

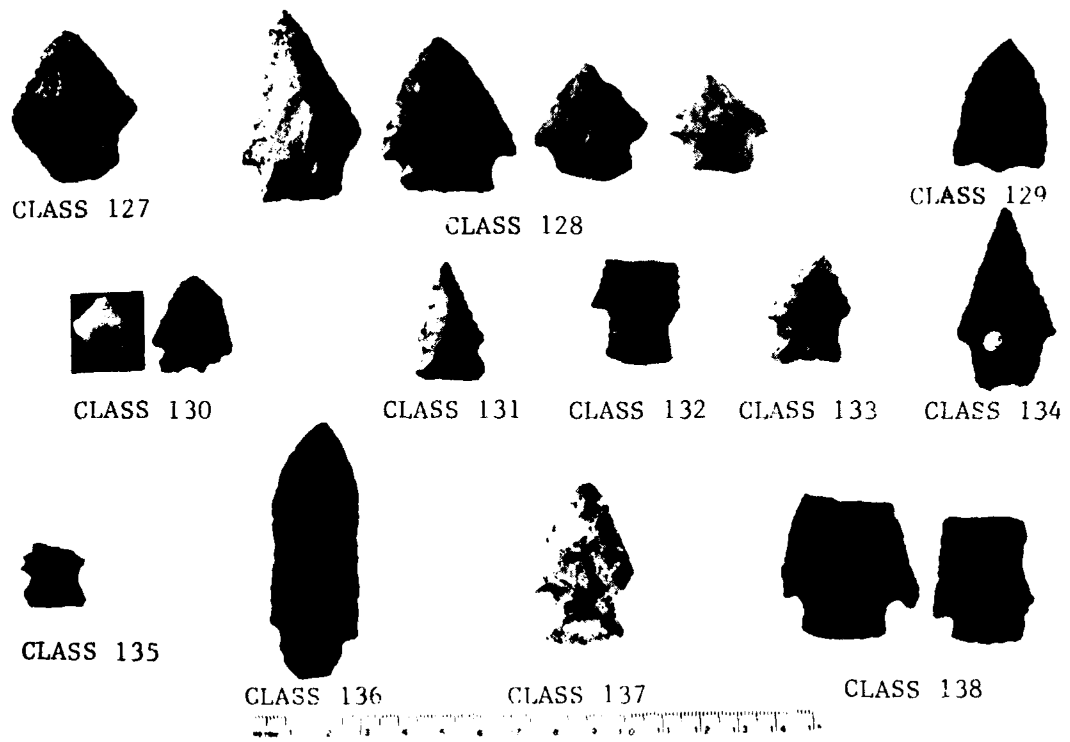

Figure 30. Point Classes. Class 127, Row 1 (1, Site 1Pi61); Class 128, Row 1 (2-3, Site 1Gr1x1; 4, Site 1Gr2; 5, Site 1Gr50); Class 129, Row 1 (6, Site 1Pi65); Class 130, Row 2 (1-2, Site 1Gr2); Class 131, Row 2 (3, Site 1Pi38); Class 132, Row 2 (4, Site 1Gr2); Class 133, Row 2 (5, Site 1Gr2); Class 134, Row 2 (6, Site 1Gr1x1); Class 135, Row 3 (1, Site 1Pi61); Class 136, Row 3 (2, Site 1Pi61); Class 137, Row 3 (3, Site 1Gr2); Class 138, Row 3 (4-5, Site 1Pi61).

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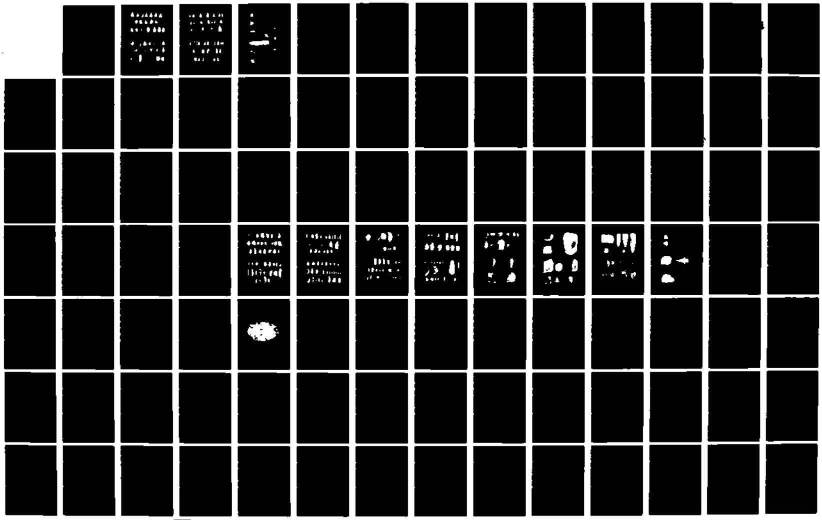

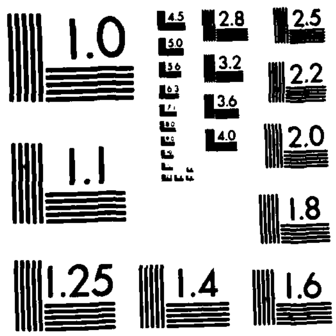
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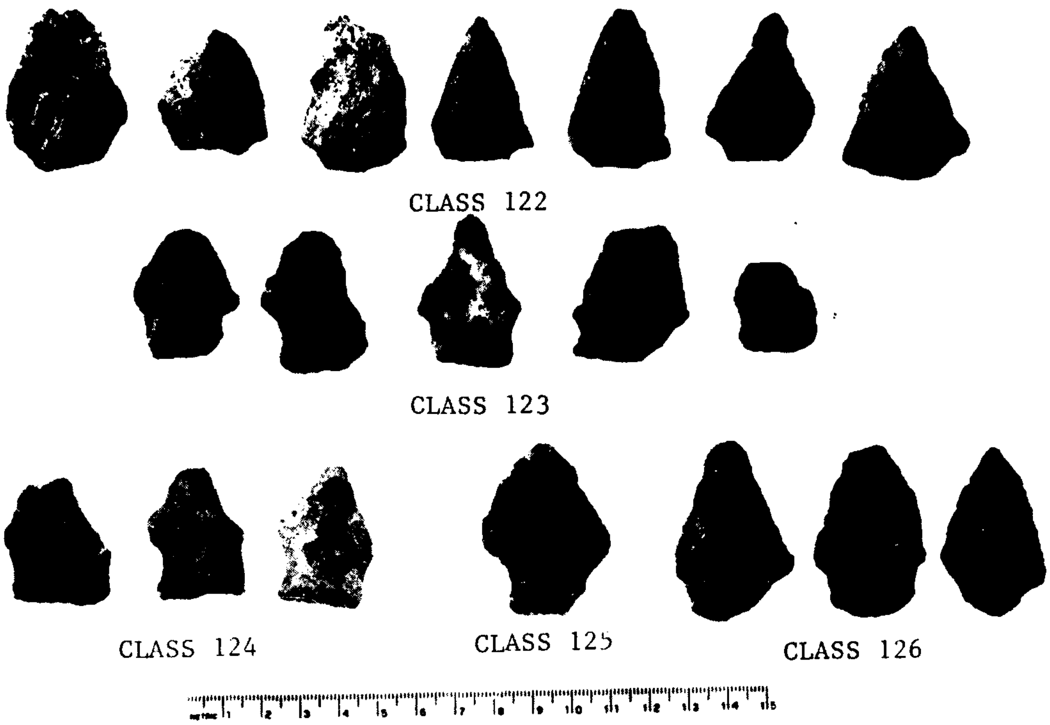

Figure 29. Point Classes. Class 122, Row 1 (1-3, Site 1Pi61; 4-5, Site 1Gr2; 6-7, Site 1Gr1x1); Class 123, Row 2 (1-2, Site 1Pi61; 3-4, Site 1Gr1x1; 5, Site 1Gr2); Class 124, Row 3 (1-3, Site 1Pi61); Class 125, Row 3 (4, Site 1Pi61); Class 126, Row 3 (5, Site 1Gr2; 6-7, Site 1Pi61).

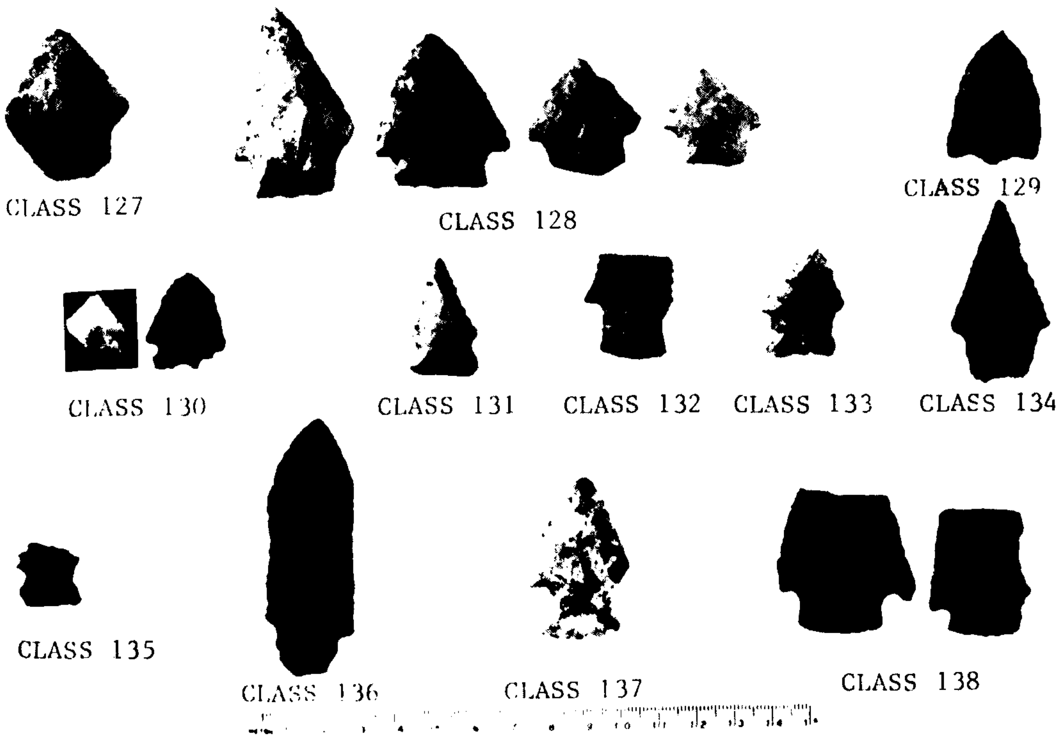

Figure 30. Point Classes. Class 127, Row 1 (1, Site 1Pi61); Class 128, Row 1 (2-3, Site 1Gr1x1; 4, Site 1Gr2; 5, Site 1Gr50); Class 129, Row 1 (6, Site 1Pi65); Class 130, Row 2 (1-2, Site 1Gr2); Class 131, Row 2 (3, Site 1Pi38); Class 132, Row 2 (4, Site 1Gr2); Class 133, Row 2 (5, Site 1Gr2); Class 134, Row 2 (6, Site 1Gr1x1); Class 135, Row 3 (1, Site 1Pi61); Class 136, Row 3 (2, Site 1Pi61); Class 137, Row 3 (3, Site 1Gr2); Class 138, Row 3 (4-5, Site 1Pi61).

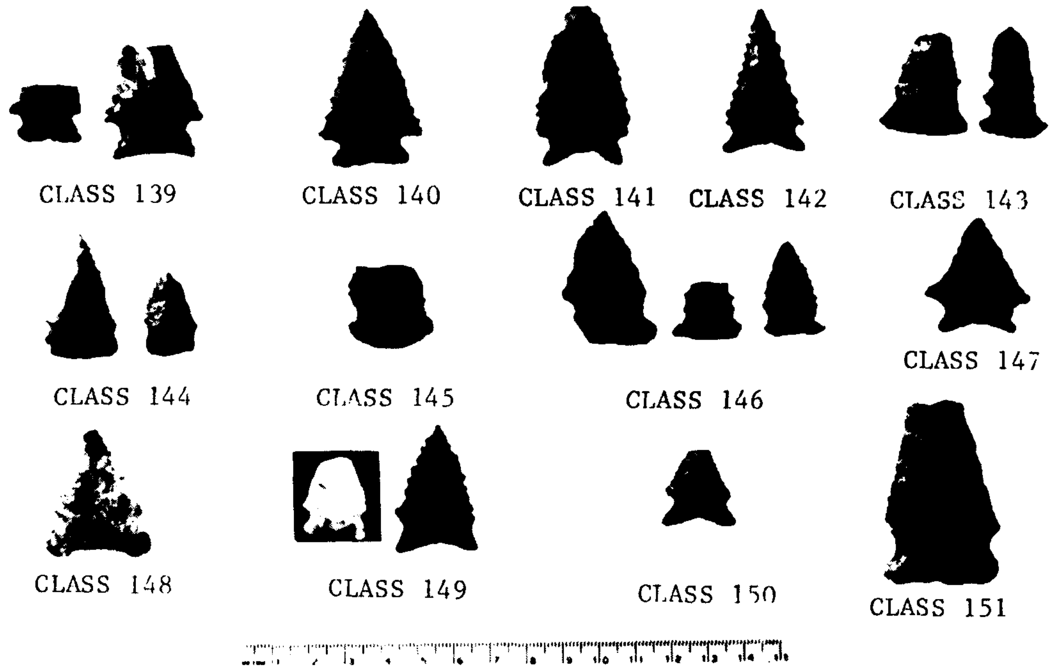

Figure 31. Point Classes. Class 139, Row 1 (1, Site 1Gr2; 2, Site 1Pi61); Class 140, Row 1 (3, Site 1Gr1x1); Class 141, Row 1 (4, Site 1Pi38); Class 142, Row 1 (5, Site 1Pi38); Class 143, Row 1 (6, Site 1Gr1x1; 7, Site 1Pi61); Class 144, Row 2 (1, Site 1Gr1x1; 2, Site 1Gr2); Class 145, Row 2 (3, Site 1Gr1x1); Class 146, Row 2 (4, Site 1Pi65; 5, Site 1Gr1x1; 6, Site 1Gr2); Class 147, Row 2 (7, Site 1Pi38); Class 148, Row 3 (1, Site 1Gr2); Class 149, Row 3 (2, Site 1Gr2, 3, Site 1Gr1x1); Class 150, Row 3 (4, Site 1Pi33); Class 151, Row 3 (5, Site 1Pi61).

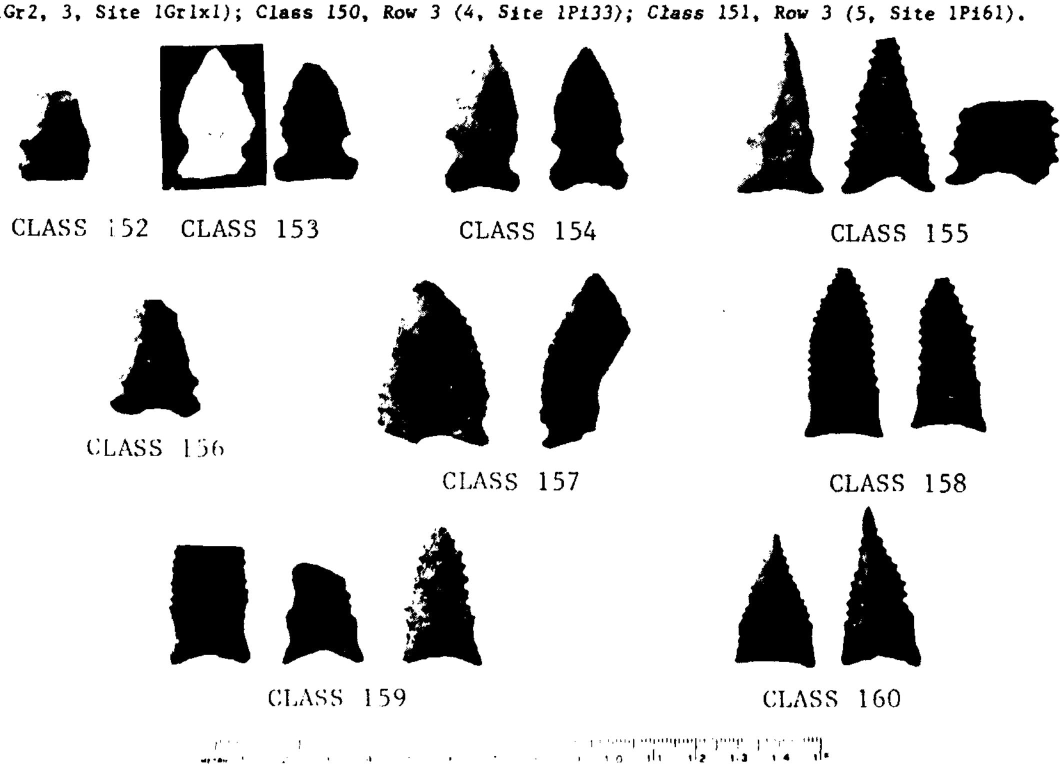

Figure 32. Point Classes. Class 152, Row 1 (1, Site 1Gr1x1); Class 153, Row 1 (2, Site 1Pi65; 3, Site 1Gr1x1); Class 154, Row 1 (4, Site 1Gr1x1; 5, Site 1Pi65); Class 155, Row 1 (6, Site 1Gr2; 7-8, Site 1Pi38); Class 156, Row 2 (1, Site 1Gr1x1); Class 157, Row 2 (2, Site 1Pi38; 3, Site 1Gr1x1); Class 158, Row 2 (4-5, Site 1Pi38); Class 159, Row 3 (1, Site 1Pi38; 2-3, Site 1Gr1x1); Class 160, Row 3 (4, Site 1Pi38; 5, Site 1Gr1x1).

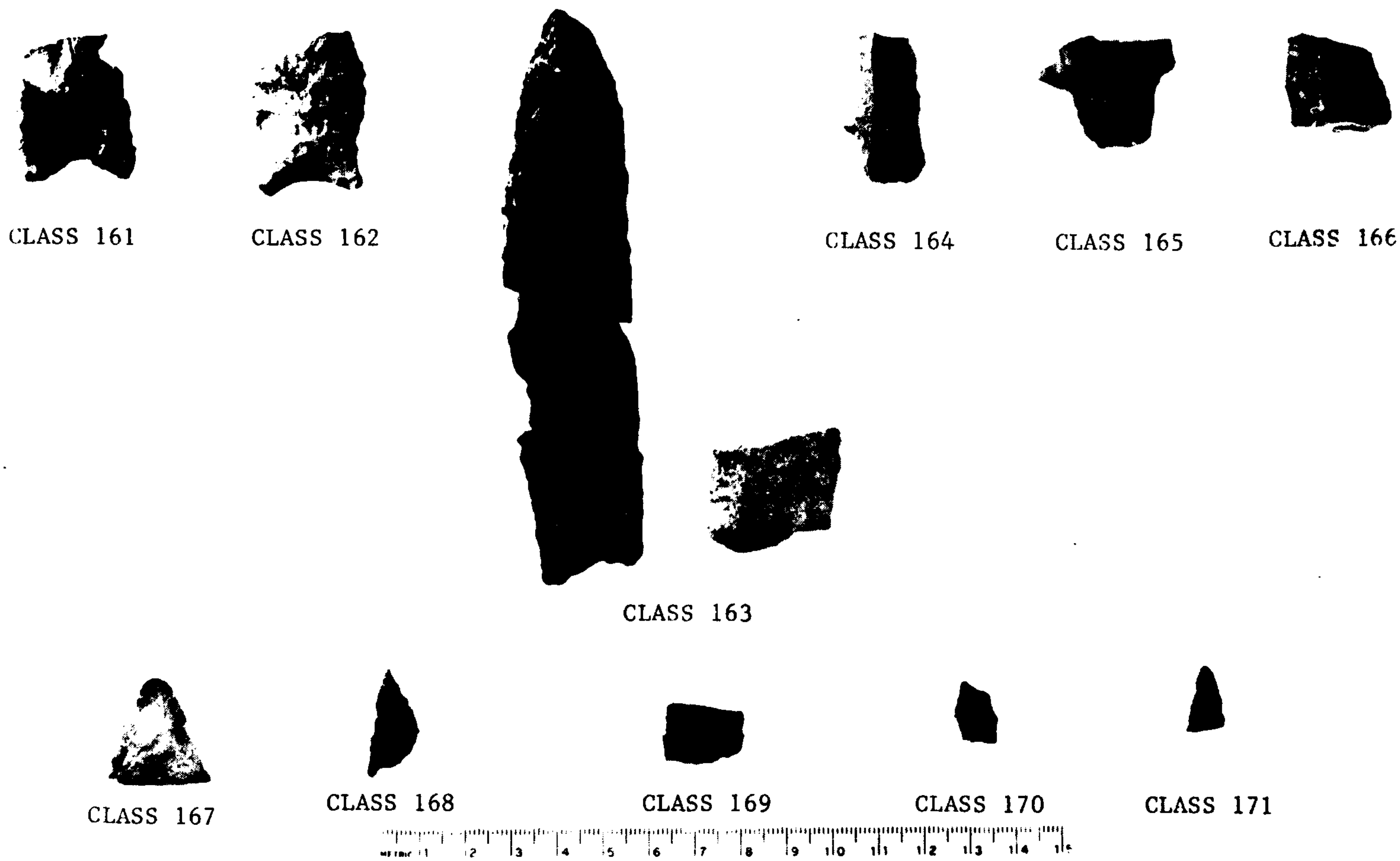

Figure 33. Point Classes. Class 161, Row 1 (1, Site 1Pi38); Class 162, Row 1 (2, Site 1Pi38); Class 163, Row 1 (3, Site 1Pi38, 4 Site 1Gr1x1); Class 164, Row 1 (5, Site 1Gr2); Class 165, Row 1 (6, Site 1Gr2); Class 166, Row 1 (7, Site 1Gr2); Class 167, Row 2 (1, Site 1Gr2); Class 168, Row 2 (2, Site 1Gr1x1); Class 169, Row 2 (3, Site 1Gr2); Class 170, Row 2 (4, Site 1Gr1x1); Class 171, Row 2 (5, Site 1Gr1x1).

Table 4. Measurements of Projectile Point Classes.

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
N	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(10)	N=(7)	N=(10)	N=(10)	N=(4)	N=(10)	(N=7)
Length Average	15.3	31.1	*	18.2	28.9	*	*	*	21.63	28.2	*	24.6	27.3	*	*	*
Standard Deviation	2.6	4.7		3.5	2.6				2.8	3.1		4.6	6.1			
Width Average	12.3	15.1	12.6	13.1	15.5	14.7	15.56	14.9	14.0	14.7	16.3	14.2	15.5	18.1	14.1	14.7
Standard Deviation	.88	1.7	1.8	1.8	4.5	1.7	3.2	1.5	2.0	2.1	3.4	3.7	3.4	4.4	2.3	1.4
Thickness Average	3.5	5.8	3.8	3.7	4.9	4.3	4.7	4.2	4.9	5.4	4.6	5.1	5.6	5.4	3.6	4.0
Standard Deviation	.93	1.2	.54	.84	1.6	.69	1.6	1.4	1.3	1.2	1.0	1.5	1.9	.34	.53	.78

Class	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
N	N=(1)	N=(1)	N=(10)	N=(10)	N=(4)	N=(2)	N=(9)	N=(1)	N=(3)	N=(2)	N=(1)	N=(2)	N=(2)	N=(2)	N=(1)	N=(1)
Length Average	*	36.9	*	*	22.6	36.2	42.5	31.0	34.5	38.2	27.7	36.55	37.7	*	*	*
Standard Deviation					2.8	6.2	8.4		3.8	3.3		5.0	.91			
Width Average	14.2	15.8	14.1	13.1	14.0	14.7	18.3	14.9	16.4	15.35	17.6	13.5	13.5	14.6	16.0	18.0
Standard Deviation	.34	*	2.1	2.4	.71	2.0	3.4		1.1	1.3		.49	.70	3.1		
Thickness Average	4.0	6.2	4.9	4.3	5.5	9.6	9.9	7.5	8.3	10.2	6.8	5	5.4	4.1	3.6	3.4
Standard Deviation	.96		1.0	1.2	.67	.70	2.9		2.4	.42		2.8	.77	.28		

Class	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
N	N=(1)	N=(7)	N=(1)	N=(2)	N=(1)	N=(1)	N=(5)	N=(1)	N=(3)	N=(3)	N=(6)	N=(11)	N=(1)	N=(1)	N=(2)	N=(1)
Length Average	*	*	18.8	34.0	32.5	*	*	*	*	52.1	50.9	52.7	50.5	49.9	*	53.2
Standard Deviation				9.2	1.0					8.0	7.8					
Width Average	11.4	12.6	10.7	14.85	18.9	23.3	25.0	22.6	20.4	22.3	21.8	22.3	20.1	14.3	20.3	21.4
Standard Deviation		1.4		2.3	2.3	1.5	5.8		.66	1.4	3.1				.07	
Thickness Average	3.9	4.0	3.4	6.6	9.6	9.9	9.9	9.7	9.4	9.1	9.4	11.4	12.0	8.7	10.7	10.2
Standard Deviation		.87		1.1	.77	.80	2.4		1.5	1.4	3.1				3.0	

Class	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
N	N=(2)	N=(1)	N=(3)	N=(3)	N=(1)	N=(4)	N=(8)	N=(5)	N=([illegible])	N=(6)	N=(2)	N=(1)	N=(2)	N=(1)	N=(1)	N=(3)
Length Average	*	*	*	52.7	*	63.1	49.3	39.9	53.7	47.3	50.3	51.6	45.0	41.6	42.5	*
Standard Deviation				8.4		3.3	7.4	7.8	7.1	8.5	8.6		3.1			
Width Average	23.5	21.5	18.6	19.6	20.3	21.5	24.3	19.2	21.2	20.3	20.6	26.6	21.0	20.2	18.7	23.3
Standard Deviation	.42		1.2	1.4		1.6	2.8	1.3	3.5	5.2	.42		.07			3.3
Thickness Average	7.8	8.0	9.3	8.1	11.0	9.4	9.9	8.2	9.0	10.3	15.0	11.3	10.2	7.9	6.2	10.3
Standard Deviation	.49		.41	0.7		1.3	2.3	.87	1.5	1.9	2.5		1.4			1.0

Class	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
N	N=(1)	N=(3)	N=(2)	N=(2)	N=(4)	N=(70)	N=(1)	N=(1)	N=(5)	N=(3)	N=(2)	N=(1)	N=(2)	N=(1)	N=(1)	N=(2)
Length Average	55.8	49.8	53.3	51.8	47.8	59.2	*	41.3	38	42.5	49.9	*	52.8	*	*	*
Standard Deviation	*	2.4	1.7	1.2	7.0	8.9	*	*	5.9	5.1	1.5	*	.21	*	*	*
Width Average	22.0	21.4	21.1	21.7	26.5	26.5	31.8	25.1	27.7	27.4	26.1	22.1	30.8	42.7	53.2	*
Standard Deviation		1.4	.07	.70	3.7	4.6			1.6	1.2	.07	1.7	1.8	42.7	53.2	*
Thickness Average	9.2	10.3	9.7	7.9	10.1	10.7	10.7	9.4	8.1	10.5	7.2	8.6	12.5	9.8	10.0	8.4
Standard Deviation		1.4	1.5	1.3	.30	.70			1.6	1.7	.07	1.0	.07			2.1

Class	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
N	N=(2)	N=(2)	N=(1)	N=(7)	N=(4)	N=(1)	N=(3)	N=(4)	N=(1)	N=(3)	N=(2)	N=(1)	N=(2)	N=(2)	N=(3)	N=(8)
Length Average	*	56.9	52.3	44.1	42.0	53.8	~	62.7	49.2	*	*	*	*	53.0	58.1	57.3
Standard Deviation		5.0	5.2	8.0	9.1	3.2		6.8	1.9					10.1	[illegible]	6.7
Width Average	*	31.2	29.9	26.9	24.7	26.0	25.9	26.9	25.4	25.7	*	16.5	28	31.7	24.2	27.8
Standard Deviation		.07	.90	[illegible]	7.8	2.5	1.1	3.0	1.1	1.9			1.8	3.1	1.0	1.7
Thickness Average	6.6	9.6	9.9	10.1	9.8	8.3	12.6	12.7	10.4	10.3	8.3	10.3	8.5	10.8	10.0	11.2
Standard Deviation	.17	.35	.79	2.1	2.1	2.6	4.8	1.6	3.0	2.3	.35		.63	2.5	1.8	1.7

Class	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
N	N=(4)	N=(4)	N=([illegible])	N=(2)	N=(1)	N=(3)	N=(5)	N=(3)	N=(3)	N=(1)	N=(2)	N=(2)	N=(1)	N=(5)	N=(2)	N=(1)
Length Average	56.2	53.8	58.3	50.3	50.8	82.3	53.4	*	*	48.2	*	38.7	39.6	51.5	*	51.8
Standard Deviation	10.2	3.3	1.3	5.1		20.6	7.0					10.5		5.9		
Width Average	26.9	29.6	33.5	31.0	*	28.1	31.8	28.0	*	31.0	24.6	26.3	29.8	28.7	27.0	23.3
Standard Deviation	2.5	1.8	.49	2.6		4.0	2.1	5.7			.49	3.9		1.9	3.0	
Thickness Average	[illegible]	[illegible]	10.3	10.5	[illegible]	11.2	10.9	9.0	11.6	8.7	9.3	9.1	10.2	10.7	9.0	10.9
Standard Deviation	.96	1.2	[illegible]	1.1		1.5	2.1	1.6	.61		2.1	1.6		2.3	1.1	

Class	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
N	N=([illegible])	N=(2)	N=([illegible])	N=(2)	N=(5)	N=(6)	N=(6)	N=(2)	N=(3)	N=(4)	N=(2)	N=(1)	N=(1)	N=(3)	N=(1)	N=(4)
Length Average		56.4	61.3		35.4	48.5	19.2	*	48.7	50.2	38.9	*	45.8	*	42.5	39.4
Standard Deviation		6.3	5.2		11.0	11.6	7.8		6.6	3.8	3.3					11.4
Width Average		29.3	33.5	36.0	31.2	21.6	21.3	*	21.3	29.7	27.4	*	35.1	*	*	32.7
Standard Deviation		[illegible]	.20	1.2	6.1	2.6	1.9		.90	2.9	.21					2.9
Thickness Average	11.8	9	11.5	11.6	9.18	9.5	8.6	10.4	8.8	9.7	10.0	11.5	12.0	11.0	12.0	9.9
Standard Deviation	2.0	[illegible]	2.4	.76	1.0	1.0	1.8	.28	.80	.55	1.2	.68		2.1		.86

Class	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
N	N=(1)	N=([illegible])	N=(1)	N=(1)	N=(1)	N=(1)	N=(1)	N=(1)	N=(1)	N=(2)	N=(2)	N=(1)	N=(1)	N=(1)	N=(2)	N=(2)
Length Average	[illegible]	[illegible]	[illegible]	*	*	49.4	*	[illegible]	45.0	*	*	55.3	48.8	40.6	*	30.4
Standard Deviation		8.0														9.1
Width Average	[illegible]	*	19.0	[illegible]	22.8	26.6	16.7	26.2	29.0	*	24.0	29.1	26.2	22.8	22.3	18.3
Standard Deviation											5.3				4.0	4.0
Thickness Average	[illegible]	5.55	7.1	[illegible]	9.8	7.8	8.0	9.3	10.0	8.5	7.1	6.5	5.2	22.8	22.1	18.3
Standard Deviation		[illegible]								.63	1.9				4.0	4.0

Class	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
N	N=(1)	N=(3)	N=(1)	N=(1)	N=(2)	N=(1)	N=(1)	N=(1)	N=(2)	N=(2)	N=(3)	N=(1)	N=(2)	N=(2)	N=(3)	N=(2)
Length Average	*	*	32.5	39.1	*	*	*	*	31.7	36.1	*	*	42.8	41.6	*	36.1
Standard Deviation									.42	.63			2.0			
Width Average	[illegible]	*	30.1	[illegible]	20.6	20.5	12.7	17.7	20.1	19.1	23.8	22.7	*	19.1	19.8	19.5
Standard Deviation					[illegible]				.91	0	2.9			.14	0.23	.07
Thickness Average	9.9	6.7	5.2	8.6	6.7	6.7	10.0	7.2	6.9	12.2	6.1	8.3	6	5.5	5.3	5.1
Standard Deviation		.41			2.6				.84	6.9	.95		.98	0	1.0	.21

Class	161	162	163
N	N=(1)	N=(1)	N=(2)
Length Average	*	*	*
Standard Deviation			
Width Average	[illegible]	25.8	28.9
Standard Deviation			.14
Thickness Average	*	5.0	8.7
Standard Deviation			1.8

*Unmeasurable.

CHAPTER V

CONCLUSIONS

Having set up a classification, its utility is proven by the formation of units whose space, time and form content are consistent enough to suggest some kind of cultural-historical integration.

Types, varieties and clusters each have a different function in the comparative analyses necessary to cultural-historical integration. Clusters have the most value in correlating widespread sequences in time and space. That is, clusters are useful in defining both traditions (entities with time depth) and horizons (entities with geographical spread). Types aid the definition of phases and varieties aid in the definition of local variations in phase content.

Most classes are readily assignable to a cluster. The classes, though discrete as regards shape, contain members which, upon consideration of other criteria, should be discriminated: that is, the classes may be brought into conformity with the traditional typology of the Southeast if we superimpose the subjective considerations typical of all existing classifications. Not all classes may be assigned to a cluster. There are many reasons for this. Some are the result of the kind of evidence usual to archaeology as well as the classification itself. The assignment of classes to clusters proceded on the following basis: (1) recognized similarities to established regional and sub areal horizon markers and (2) cluster justification based upon association within discrete proveniences. Clusters include all points which appear to be roughly contemporaneous.

The following discussion emphasizes historical comparison of Gainesville Lake area projectile point clusters with other clusters associated with the Eastern Woodlands. Each cluster is described separately, noting its content, distribution and chronology. Sixteen projectile point clusters were described for the Gainesville Lake area. They follow an order from those supposed to be the most recent to the earliest. Table 5 summarizes the clusters and the types or varieties assigned to each.

CULTURE/HISTORIC INTEGRATION

Late Woodland-Mississippian Triangular Cluster

The small triangular arrow point has been found over an area stretching from the Atlantic coast to the Plains. They have been given a variety of local names; including: Madison (Scully 1951, Bell 1960, Holland 1970, Cambron and Hulse 1964); Hamilton (Kneberg 1956); Pinellas (Bullen 1975); Haywood Triangular (Keel 1976); Dallas (Lewis and Kneberg 1970); and Guntersville (Cambron and Hulse 1964).

Minor differences in shape have been used to describe two major divisions: one is the Hamilton point (Kneberg 1956:24, Faulkner and

McCollough 1973:143-144, Faulkner 1968). These points have an incurvate base and incurvate or straight blade edges which are finely pressure flaked. Faulkner and McCollough (1973:143) ascribed four Normandy types (44-47) to the Hamilton cluster. Association with the Late Woodland Hamilton and Mason cultures in East Central Tennessee is suggested (Lewis and Kneberg 1970:110-111, Faulkner 1968:42). Associated ceramics have been dated to A.D. 770 and A.D. 890 in the Tims Ford Reservoir (Faulkner 1968:42). A Late Woodland pit, at the Westmoreland-Barber site in the Nickajack Reservoir, containing Hamilton projectile points, was dated to A.D. 625 (Faulkner and Graham 1966:114). It has been suggested that this date is too early (J.B. Graham, Personal Communication) and a date closer to A.D. 850 for the first appearance of this type would seem likely.

The Hamilton type is known from north Alabama (Cambron and Hulse 1964) and seems to be associated with the Late Woodland period. Small triangular points, in association with Late Woodland McKelvey ceramics, are dated to A.D. 1010 (Futato 1975:57), and small triangular points in association with Terminal Woodland deposits in both the Warrior and Cahaba drainages of north-central Alabama have been dated to between A.D. 900 and A.D. 1100 (Jenkins and Nielsen 1974, Ensor 1976). This point was associated with Late Woodland Autauga phase pits in central Alabama on the Alabama River and dated to circa A.D. 900 (Dickens 1970).

The other major division of the artifact shape, the Madison point, was described by Cambron and Hulse (1964:53). It has straight blade edges and straight to slightly incurvate basal edges. The most characteristic attribute for these points seems to be its straight base. Webb and DeJarnette (1942) illustrate a cache of small triangular points with a Koger's Island burial: they have straight basal edges and straight blade edges. At the Lubbub Creek site in Pickens County, a similar cache was found with a Moundville related burial (Fig. 54). Other Mississippian types (Dallas Triangular and Guntersville, for mple) have this straight basal configuration.

In the Gainesville Lake area, much variation occurs in the Late Woodland-Mississippian Triangular Cluster. Twenty-two classes were segregated on the basis of shape and length. From this, three type-varieties were formed on the basis of archaeological associations and shape criteria. A great deal of classificatory 'slop' is present and the types are less discrete than one would wish.

Class 10 points may be ascribed to Early Miller III Vienna subphase as a major type for that period. Pits associated with this subphase and containing these points have been dated by Carbon-14 to A.D. 910, A.D. 760 and A.D. 730 (Vol. 5, this report). These have been named Pickens var. Pickens. They seem to have been made for nearly 200 years. This time span begins sometime around A.D. 700 and continues to around A.D. 900, depending on how one interprets the carbon dates.

The other two types which occur in the Middle Miller III Cofferdam subphase have been designated Hamilton var. Gainesville and Madison var. Gainesville. Hamilton var. Gainesville points are similar to the Hamilton points produced by other Late Woodland peoples further north. The bases for this variety are Classes 4-6 and 16. The other type, Madison var. Gainesville, is composed of classes 1-3. It is associated with the Late

Miller III Catfish Bend subphase, the Terminal Miller III-Early Mississippian Gainesville subphase, and Later Mississippian occupations. These two types appear to be dated to a period between A.D. 900 to A.D. 1500. Some of these points have been found at Site 1Pi61 in what has been described as an Early Miller III context, suggesting a first appearance sometime around A.D. 700.

Though these two varieties are contemporary manifestations, we may justify the establishment of two separate types and varieties. A point type and its variety need not be regarded as the product of a single subphase, nor should we require it. Types are properly indices of continuity, as well as means to determine diversity. It may well be that the concurrence of these types at different times may reflect functional differences between them. Pickens var. Pickens points are frequently broken along the lower portion of the blade. As a result, the haft and blade margins are frequently ground, as would occur with a great deal of use and/or platform preparation. In contrast the Hamilton and Madison points are generally fractured on the distal one-third of the point as would occur in an impact fracture.

The small to medium triangular forms were used in the Gainesville Lake area for some 800 years from A.D. 700 to A.D. 1500. Pickens var. Pickens points appear to be the earliest. If a stylistic similarity between these and points of the Greenville complex (Larson 1959) to the north and east can be proven, it might be suggested that these small to medium triangular types originated in the Tennessee Valley region. This is only speculative, given the state of the current evidence.

In any event these types differ from the projectile points associated with the Late Miller II Turkey Paw subphase. Perhaps this difference was technological and associated with the introduction of the bow. The light triangular forms replace all other forms after A.D. 700-800.

Middle Woodland Tapered Shoulder Cluster

This cluster contains straight to contracting haft projectile points with tapered shoulders. These are frequently found in a Late Miller II Turkey Paw subphase context in the Gainesville Lake area. They resemble certain Late Archaic forms known as Gary, Little Bear Creek and Flint Creek. The character of this cluster is set by the tapered shoulders and straight blade edges. Other traits such as technique of manufacture and degree of thermal alteration may also contribute to distinguishing members of this cluster.

The points of the cluster range from those which resemble Late Archaic forms to those which resemble members of the Lanceolate Spike Cluster. Two type varieties have been created based on Classes 55-60. These classes constitute the substance of the Middle Woodland Tapered Shoulder Cluster in the Gainesville Lake area. The name Tombigbee Stemmed var. Tombigbee is given to specimens within Class 55, 57 and 58. The other variety of Tombigbee Stemmed termed var. Turkey Paw is comprised of Classes 56, 59 and 60.

It is possible, though by no means certain, that these two varieties occur at different times within the Middle Woodland Miller cultural tradition. The Late Miller II subphase component at 1Gr1X1 contains many var. Turkey Paw projectile points and it may be that this variety occurs in the latter portion of the Miller II phase. Tombigbee Stemmed var. Tombigbee may occur in the early Late Miller II and continue until the end of that phase. It may occur even earlier in the Miller I phase. It is conceivable that separation on metrical characters will prove interesting. The smaller Class 55, 57 and 58 forms may occur during Late Miller I and Early Miller II.

Little is known about these types in a Middle Woodland context outside of the Gainesville Lake area. In the Normandy Reservoir, Faulkner and McCollough (1973:113) mention projectile points they consider might be Middle Woodland. Normandy lithic type 88, a contracting stemmed, tapered shoulder form has been found on Middle Woodland sites there, but no firm association is established. The Normandy points are similar to the Tombigbee Stemmed forms. Montet-White (1968:61-66) described contracting stemmed points from Illinois. They are called Mason, Burkett and Dickson projectile points and seem to be contemporary with some of the Tombigbee Stemmed points described here.

Josselyn (1960) illustrates projectile points from the McVay and Porter Hopewell villages in southwest Alabama which resemble the Tombigbee Stemmed var. Tombigbee points. Estimations based upon the associated pottery suggest dates in the range of 100 B.C. to A.D. 600. We may suggest a time range of A.D. 400 to 700 for these forms in the Gainesville Lake area, but they may occur earlier. In any event, in the Gainesville Lake area, something of a stylistic continuum exists from the early Miller I phase. There is an apparent similarity in thickness and haft element width between the Late Middle Woodland Tapered Shoulder Cluster and the early Middle Woodland Lanceolate Spike Cluster forms.

Lanceolate Expanded Haft Cluster

This cluster contains expanded haft projectile points with excurvate to straight blade edges and incurvate expanding lateral haft element edges. Many such points come from Site 1Gr2 where a large Miller I component is present. Three types may be described. They match established Middle Woodland types.

Classes 41-47 and 49-50 have been given the type name Mud Creek var. Greene. These projectile points come primarily from Site 1Gr2 in association with points of the Lanceolate Spike cluster. This form is characteristic of Miller I occupations in the Gainesville Lake area. Other members of this cluster differ only slightly from the Mud Creek forms. Examples include types Swan Lake var. Unspecified and Baker's Creek var. Unspecified. There are not very many of these. They correspond to Classes 36 and 38 respectively. They are found on Miller I and some Miller II sites.

The Mud Creek points have a distinctive morphology. They have a broad spatial distribution, but a relatively short temporal duration. The

types Mud Creek, Swan Lake and Baker's Creek have long been recognized in north Alabama (Cambron and Hulse 1964) and have been associated with Copena components in the Tennessee Valley (Walthall 1980).

In the Normandy Reservoir of east-central Tennessee, Faulkner and McCollough (1973:145-146) described a Middle Woodland Lanceolate Expanded Stem Cluster (Normandy Lithic Types 61-65) which is somewhat like the Gainesville Lake area Lanceolate Expanded Haft Cluster. They come from Late Middle Woodland Owl Hollow phase contexts there and are thought to date to between A.D. 200 and A.D. 600 (Cobb 1978:197). The Normandy expanded haft points look like some expanded haft points found even further north (Faulkner and McCollough 1973).

The Illinois Hopewell types Steuben Stemmed (Morse 1963) and Lowe Flared Base (Winters 1967) resemble the Tennessee Valley Baker's Creek type. A shallow side notched lanceolate projectile point from Illinois known as Ansell is associated with Havana sites (Montet-White 1968). It is dated to somewhere between A.D. 100 to A.D. 300. It also looks like the Mud Creek var. Greene projectile points from the Gainesville Lake area.

Expanded haft points come from the Bynum village area in association with Miller I ceramics (Cotter and Corbett 1951). Mud Creek specimens come from the Okashua site near Columbus, Mississippi (Atkinson and Elliott 1974:Plate 6). These forms too seem associated with Miller I. These too resemble the Mud Creek var. Greene projectiles. An expanded haft form was found in apparent association with a Miller I phase pit at the Cofferdam site in Lowndes County, Mississippi (Blakeman et al. 1976). A corrected radiocarbon date of A.D. 125±228 was obtained from bone of an associated human burial.

Points recovered from Site 1Pi61 were of the expanded haft variety, some with Late Miller I and Early Miller II associations. Mud Creek var. Greene projectile points occur at Site 1Gr2 along with numerous lanceolate spike points. The spike points usually occur somewhat earlier -- before 100 B.C. for the most part. We may, nevertheless, estimate a chronology from our scant data.

If the Mud Creek var. Greene forms are truly associated with Miller I components and if their resemblance to points dated elsewhere means anything, a dating sometime in the Middle Woodland period or from around 100 B.C. to sometime around A.D. 400 may be proposed.

Lanceolate Spike Cluster

This cluster was formed from Classes 22-29. They may be divided into two type-varieties. Classes 28-29 become the type New Market var. Unspecified. These projectile points have weak shoulders and contracting lateral haft element edges. Classes 22-27 form the type Bradley Spike var. Craig's Landing. These are narrow, thick lanceolate points with contracting excurvate bases. Many of the Bradley Spike var. Craig's Landing points look like the small Tombigbee Stemmed forms. Points from these two clusters are easily confused and are undoubtedly closely related.

At Site 1Gr2 and 1Pi61, spike forms occur, as do Miller I and Miller II ceramics, but it is the author's opinion that the larger Tombigbee Stemmed forms are more likely to occur in the Late Miller II, Turkey Paw subphase. There is no proof, though, and there is no available chronology of either the Tombigbee Stemmed or Lanceolate Spike points. It might be sensible to agree that they are really one type arbitrarily made into two. Both point types occur during Miller I. If they are the same we still need to account for the range of variability, if such exists beyond observational error.

Lanceolate spike and expanded stem forms occur together in individual Owl Hollow phase dwellings in the Normandy Reservoir (McCollough 1978:25). The Lanceolate Spike Cluster points in the Normandy Reservoir (Normandy lithic types 59-60) resemble Bradley Spike var. Craig's Landing and New Market var. Unspecified. The late Middle Woodland Owl Hollow phase contains the spike forms. The type Bradley Spike occurs in early Woodland contexts in Tennessee (Kneberg 1956). The Bradley Spike points of northern Alabama (Cambron and Hulse 1964) also resemble the Gainesville Lake area spike forms.

Faulkner and McCollough (1974:328-329) point out that in the Late Middle Woodland Owl Hollow phase there are fewer medium triangular projectiles of the McFarland Cluster than projectile points of the Lanceolate Spike Cluster and Expanded Stem Cluster. They go on to admit to being unable to determine the relationship between the various clusters, though they suggest that in the future someone might come up with a plausible reason for finding both types in association. Since these two projectile point clusters are found at different places at the Banks V site in the Normandy Reservoir, McCollough (1978:26) suggested different functions for the two seemingly synchronous forms.

Perhaps the Middle Woodland Lanceolate Spike forms in the Gainesville Lake area represent a specialized tool: projectiles. The narrow, thick, often resharpened appearance of these artifacts suggests such a hypothesis since the edge angles would have made cutting difficult. At any rate, these points were dated to A.D. 100 to A.D. 600 in the Normandy Reservoir and were thought to supersede the Early Middle Woodland McFarland Cluster sometime early in the first millennium A.D. In the Miller I component at Site 1Gr2 lanceolate spike forms make up 18.4 percent of the stemmed projectile points, but they comprise only 4.3 percent of the projectile points at Site 1Pi61. The Late Miller II ceramic assemblage from the latter site has been dated to A.D. 420±170. In the Gainesville Lake area these forms could date from the last century B.C. to around A.D. 400.

Flint Creek Cluster

This cluster consists of three type varieties. It is composed of Classes 65-72, 83-84 and 118-119. The type Flint Creek var. Tombigbee is composed of Classes 65-67 and 118-119. These are medium sized projectiles with excurvate blade edges, parallel to slightly expanding lateral haft element edges and straight to incurvate, horizontal to tapered shoulders. These projectile points are finely retouched and well made.

Galm (Personal Communication) has found this form in a sealed early Alexander context in northeast Mississippi at Site 22It563. In the Gainesville Lake area this type occurs on three of the five sites investigated: one of these, Site 1Gr2, also contains the largest Alexander Henson Springs component yet excavated in the Gainesville Lake area. At the Crump site in the Buttahatchee drainage, it is the most frequent type encountered on the Henson Springs phase type site of the Alexander culture (DeJarnette et al. 1975a).

The type Flint Creek var. Flint Creek consists of Classes 68-72. These points have barbed shoulders, excurvate blade edges, and broader blades than the var. Tombigbee.

The Flint Creek var. Unspecified consists of Classes 83-84. These are crudely flaked, broad bladed forms with excurvate blade edges and incurvate horizontal shoulders. The Flint Creek projectile point occurs in the Tennessee Valley region of northern Alabama. Cambron and Hulse (1964) suggest a Late Archaic-Early Woodland affiliation for it. The Normandy lithic type 80, which resembles var. Flint Creek, is part of the Wade Cluster form in the Normandy Reservoir (Faulkner and McCollough 1973:Plate XL). A Terminal Archaic Wade phase occupation has been dated by radiocarbon to 1010±135 B.C. at the Banks III site (Faulkner and McCollough 1974:320).

O'Hear and Conn (1977) have found two Flint Creek projectile points in apparent association with Miller II phase ceramics at the L.A. Strickland site in northeast Mississippi. The var. Tombigbee points at Site 22It563 in northeast Mississippi are associated with an Alexander component which dates from between 700 B.C. and 100 B.C. On the other hand, the similarity between the var. Flint Creek forms and certain Wade Cluster projectiles found in the Normandy Reservoir and dated to the beginning of the last millenium B.C. suggests an even earlier dating to around 1000 B.C. The Flint Creek Cluster probably dates between 1000 B.C. and 300 B.C. in the Gainesville Lake area.

Wade Cluster

Three type-varieties are represented by the Wade Cluster. These in turn consist of Classes 73, 74 and 79-82. Wade var. Wade consists of Classes 79-82. These forms have deeply barbed shoulders and expanding to parallel lateral haft element edges.

Cotaco Creek var. Cotaco Creek consists of Class 73. They have broad blades combined with incurvate horizontal shoulders.

Motley var. Unspecified consists of Class 74. These resemble the Motley projectile point known from the lower Mississippi Valley (Ford, Phillips and Haag 1955:129-130). This occurs on Poverty Point period sites. Those date to around 1000 B.C. (Weber and Webb 1970).

The Wade projectile point type occurs in northern Alabama (Cambron and Hulse 1964) and Tennessee (Faulkner and McCollough 1973:149), where Normandy lithic types 80-82 are attributed to Terminal Archaic Wade occu-

pations. At the Westmoreland-Barber site in the Nickajack Reservoir the Wade projectile point occurs in early Woodland levels dated to 755±155 B.C., and 340±150 B.C. (Faulkner and Graham 1966). Late Archaic Wade components on the Cumberland River date somewhere between 1280±160 B.C. and 460±200 B.C. (Morse and Polhemus n.d.:28). A terminal Archaic Wade Cluster feature at the Banks site in the Normandy Reservoir has been dated to 1010±130 B.C. (Faulkner and McCollough 1973:320). Two Wade related features at the Nowlin II site in the Normandy Reservoir date to somewhere between 1075 B.C. and 970 B.C. (Keel 1978:156).

These data suggest a date somewhere between 1200 B.C. and 700 B.C. for the Wade occupations of eastern Tennessee. One can only suggest a similar chronology for the central Tombigbee Valley, since we have no other data. If we accept such a chronology we could also accept an association with Wheeler series ceramics. The Wade, Cotaco Creek and Motley forms may date from around 1200 B.C. to 500 B.C. in the lake area, that is to the Terminal Archaic and Middle Gulf Formational periods of the Gulf Coastal Plain.

Little Bear Creek Cluster

A total of seven type-varieties can be defined from 12 classes. This cluster encompasses a wide range of Late Archaic stemmed forms. Since even less temporal/stratigraphic control is available for these forms, we must, once again, rely on data from other sites for our discussion of chronology.

One type in the Little Bear Creek Cluster is the Gary projectile point. Bell (1960) noted that the Gary projectile point type as defined by Newell and Krieger (1949) shows considerable range in variation. Ford, Phillips and Haag also noted the too broad definition of this type and stated a need to subdivide the whole group (Ford, Phillips and Haag 1955:127). With this need in mind, the contracting haft projectile points recovered from the Gainesville Lake area were subdivided into several type-varieties. In earlier discussions of the tapered shoulder cluster many slightly contracting haft projectile points were described as Gary (Jenkins 1975). These have since been renamed and Gary is now reserved for those medium to long bladed forms with horizontal to slightly tapered shoulders.

Gary var. Tombigbee consists of Classes 91-92 and 94-97. These forms have horizontal shoulders, excurvate blade edges, and contracting lateral haft element edges. Gary var. Unspecified consists of Class 98 and is a broad, excurvate bladed, contracting haft form with tapered shoulders. These large, Late Archaic stemmed forms have a distribution centered somewhere in the lower Mississippi Valley. They should be associated with people of the Late Archaic period in the central Tombigbee Valley and northern Alabama.

Three varieties of Little Bear Creek projectile points may be described. They resemble the Gary type, but have a parallel haft element. The medium to long blade and horizontal shoulders of the Gary projectile points resemble those of the type Little Bear Creek var. Little Bear Creek. This type consists of Classes 101-102. These points have excur-

vate blade edges, horizontal shoulders and straight parallel lateral haft element edges. Little Bear Creek var. Gainesville specimens consist of Classes 103 and 104. They have straight blade edges, straight horizontal shoulders, and straight parallel lateral haft element edges. Straight blade edges are the characteristic which distinguishes this variety from var. Little Bear Creek. Little Bear Creek var. Unspecified consists of Class 89. These medium sized points have strongly excurvate blades and tapered shoulders.

The type Mulberry Creek var. Unspecified consists of Class 105. These are large, recurvate bladed projectiles with broad blades and incurvate horizontal shoulders.

All the above look similar and resemble the Late Archaic stemmed points of northern Alabama and the lower Mississippi Valley. There are slight differences, but whether these differences mean anything in terms of culture history is yet to be seen. DeJarnette, in an editorial comment on a cache of Late Archaic stemmed forms found in the Tennessee Valley (in Smith and Smith 1960), cautioned against creating new types based solely on blade shape variation. This was sensible, since resharpening may alter the original blade configuration. Although our type-varieties were founded on blade shape variation, we feel that these are valid divisions.

Cambron and Hulse (1964) assign these types to the Shellmound Archaic in the Tennessee Valley region of north Alabama. They occur at the Little Bear Creek site and the Mulberry Creek site (Webb and DeJarnette 1948a, 1948b). Coe (1964) defined the Savannah River projectile point in the Carolina Piedmont where it occurs on many Late Archaic sites. Radiocarbon dates from Stalling's Island have placed the Late Archaic Savannah River culture sometime between 2750±150 B.C. and 1780±150 B.C. (Bullen and Greene 1970:11-12).

Closer to the Gainesville Lake area, recent excavations at the Okashua site in Mississippi yielded two radiocarbon dates from a feature associated with a Little Bear Creek projectile point. These dates were 2055±80 B.C. and 2220±90 B.C. (Wynn and Atkinson 1976:58). Large stemmed forms were also found and these appear to be associated with the Late Archaic dates; they resemble the Little Bear Creek var. Little Creek.

Oakley and Futato (1975:Plates XIX and XXVI) illustrate Little Bear Creek projectile points from the Bear Creek Reservoir of northwest Alabama. Two radiocarbon dates from features associated with these points yielded determinations of 1650±180 B.C. and 1070±75 B.C.

Other chronological data comes from Clarke County, Alabama. Little Bear Creek projectile points were found in apparent association with Bayou La Batre ceramics in a sealed zone on the lower Tombigbee River (Chase 1972:152-161). These points resemble types in the Little Bear Cluster of the Gainesville Lake area. Many look like Little Bear Creek var. Gainesville. Some have contracting hafts and resemble Gary var. Tombigbee. These points may date from sometime around 1000 B.C. until sometime around 100 B.C. in that area, if we concede that Bayou La Batre lasted that late.

From the carbon dates of Little Bear Creek projectile points and their association with Bayou La Batre ceramics on the lower Tombigbee River (Chase 1972), the proposed chronology for this form in the Gainesville Lake area is from sometime around 2500 B.C. to sometime around 1000 B.C. or as late as 500 B.C. Var. Little Bear Creek may occur earlier than var. Gainesville. Gary projectile points at Poverty Point related sites in the lower Mississippi Valley have been dated by association and thermoluminescense to around 1000 B.C. (Weber and Webb 1970). Mulberry Creek types may be dated to sometime around 2000 B.C., though none of this can be substantiated.

Benton Cluster

Only four Benton points have been recovered in this investigation. They are more frequently found in the Tennessee River Valley of northern Alabama.

The Benton Cluster in the Gainesville Lake area consists of Classes 114-115. This has been designated Benton var. Benton. They have short, broad haft elements and relatively wide, excurvate blades with straight bases. They are well made artifacts.

Benton associated dates are available from the Spring Creek site, a multicomponent Late Archaic-Woodland site in Perry County, Tennessee. A radiocarbon date of 2645±210 B.C. came from charcoal associated with the Benton cluster (Peterson 1973:38). Another date comes from a lower stratum, which contained no diagnostic artifacts, but was dated to 3055±260 B.C. (Peterson 1973:39).

If these dates are relevant, Benton materials date to sometime between 3000 and 2500 B.C. in that area. I think that they are somewhat late. Rafferty et al. (1980, Personal Communication) excavated Archaic material at the East Aberdeen site near Aberdeen, Mississippi. The Benton component was associated with two radiocarbon determinations: one of 3575±75 B.C. and the other 3695±100 B.C.

These data suggest a chronology for Benton beginning sometime around 3800 B.C. and ending sometime around 3000 B.C. in the Gainesville Lake area. Cambron and Hulse (1964) suggest a chronology from 4000 B.C. to 2000 B.C. in the Tennessee Valley. Lewis and Kneberg (1961) found 94 percent of the Benton types at the Eva site just above the Morrow Mountain occupation in the lower levels of the Big Sandy stratum, adding support to the argument.

Morrow Mountain-White Springs Cluster

This cluster consists of Classes 122-128 and contains three type-varieties. All artifacts in this cluster use Tallahatta quartzite as the raw material, which may indicate Coastal Plain affiliation during Middle Archaic times in the Gainesville Lake area.

Vaughn var. Vaughn consists of Classes 123-127 and have broad, short, haft elements. The term Vaughn was first used by Atkinson (1974) to describe a form found at the Vaughn mound near Columbus, Mississippi. These points were crudely flaked, possessed broad, short haft elements and have concave lateral haft element edges which produced a broad side notched appearance. The similarities between the Gainesville Lake area types and those from the Vaughn mound and Site 1Su26, near Demopolis, seem sufficient to permit the description of a new type. This type is assigned to the Morrow Mountain-White Springs Cluster. It may represent a local Middle Archaic tradition with close ties to the Coastal Plain Archaic. Some of these Vaughn var. Vaughn are indistinguishable from the Elora type which may have strong Coastal Plain affinities.

Demopolis var. Demopolis consists of Class 122. It has transversely fractured or unflaked basal edges, perhaps a remnant of the original flake-blank platform. This type has a broad, short haft element and incurvate tapered shoulders.

White Springs var. White Springs consists of Class 128. They have broad, short haft elements, horizontal shoulders, and straight, parallel lateral haft element edges.

In other areas types assigned to this cluster are named Morrow Mountain, White Springs, Denton, and Sykes. Morrow Mountain and White Springs points were found in a burial at the Stanfield-Worley bluff shelter in northwest Alabama (DeJarnette et al. 1962). These types also occur in the Tennessee Valley, and other places where Morrow Mountain projectile points are dated to around 4500 B.C. (Coe 1964, DeJarnette et al. 1975a, Griffin 1974).

A Vaughn var. Vaughn projectile point was found in a sealed context in the Vaughn mound. Bone from a nearby human burial was dated to 4660±95 B.C. A second radiocarbon date from slightly above the first burial produced a date of 3800±85 B.C. (Atkinson 1974:126). A date of 5515±1058 B.C. was obtained from a buried Middle Archaic stratum at Site 1Su26 below Demopolis (Curren, Personal Communication). The Vaughn and one Demopolis point recovered from this stratum were all manufactured from Tallahatta quartzite.

Dated charcoal from a stratified Archaic site in Quitman County, Mississippi may date Denton and Opossum Bayou projectile points. These specimens have broad haft elements and wide blades. Two dates are available: one was 3436±125 B.C. and the other was 3277±130 B.C. (Connaway 1977: 137). Denton projectile points resemble the Vaughn var. Vaughn types from the Gainesville Lake region.

Of the two types defined for this cluster, Vaughn var. Vaughn and Demopolis var. Demopolis, the Demopolis forms may be the earliest, if certain resemblances to Eva types are used as a determining characteristic. The Vaughn specimens look like the Sykes type from Tennessee. Sykes has a Middle to Late Archaic affiliation and shows up consistently in the Big Sandy stratum (Lewis and Kneberg 1961:40-43). Faulkner and McCollough described a White Springs-Sykes Cluster for the Normandy Reservoir. Normandy lithic types 115 and 116 look like Eva forms and Morrow Mountain

types. They may occur toward the early portion of a time span which runs from sometime around 6000 B.C. to sometime around 4000 B.C. (Walthall 1980).

A chronology beginning around 5000 B.C. and lasting until 4000 B.C. is possible for the Morrow Mountain-White Springs Cluster in the Gainesville Lake area. The Vaughn points may date to the early third millennium B.C.

Eva Cluster

This cluster consists of a single type-variety. Based on Class 129, it is a basally notched point characteristic of the Eva points found at the Eva site in Benton County, Tennessee, where they have been dated to 5200 B.C. (Lewis and Kneberg 1961). This type occurs in the western Tennessee Valley (Cambron and Hulse 1964).

Some Eva types may be confused with Morrow Mountain projectile points (Faulkner and McCollough 1973:153-154). The chronology from the Eva site suggests that the Eva and Morrow Mountain types are each distinct horizon markers. A chronology beginning sometime around 6000 B.C. and lasting to 5000 B.C. is possible for the Eva form in the Gainesville Lake area.

Bifurcate Cluster

The Bifurcate Cluster in the Gainesville Lake area is postulated on the scant basis of two points from Site 1Gr2. This cluster consists of Class 130. It is an expanded haft, bifurcate point. It resembles the type Kanawha Stemmed (Broyles 1971) at the St. Albans site in West Virginia. Chapman (1975:Plate XXVIII) illustrates two specimens which resemble this class.

The Kanawha Stemmed points were dated to 6210±100 B.C. at the St. Albans site (Broyles 1971). A chronology from 6770±250 B.C. to 6200 B.C. was suggested for the bifurcate forms at Rose Island (Chapman 1975:213-214). On no better evidence, we may suggest a similar chronology for the point in the Gainesville Lake region.

Kirk Cluster

One type-variety belongs in the Kirk Cluster in the Gainesville Lake area, although this includes a wide range of morphological characters. Kirk var. Unspecified consists of Classes 132-134 and 136 (which are stemmed variants) and Classes 131, 135 and 137-146 (which are corner notched).

These points have straight blade edges, expanding haft elements, and horizontal to barbed shoulders. Differences in size occur. The smaller examples resemble the type Autauga (Cambron and Hulse 1964), or the Standing Boy Flint Industry of the central and lower Chattahoochee basin (DePratter 1975:9, Huscher 1964). Classes 137-143 are large and deeply

corner notched and resemble the northern Alabama types such as Decatur, Pine Tree, Eucusta and Kirk Corner Notched. Kirk points were recovered from sealed strata within the lake area, but little stratigraphic evidence was collected and no dating evidence. Once again we must rely upon comparisons with similar artifacts from elsewhere.

Kirk Corner Notched forms were dated to 6980±160 B.C., 6900±320 B.C., and 6850±320 B.C. at the St. Albans site in West Virginia (Broyles 1971:47). At Icehouse Bottom, Kirk Corner Notched also bracket a time span from 7485 B.C. to 6575 B.C. (Chapman 1973, 1976). At both sites, the smaller points were stratigraphically lower than the large variety Kirk Corner Notched (Chapman 1976:5). The deeply corner notched, excurvate ground base forms occur even lower in the deposit than the other Kirk forms (Chapman 1976:2). A zone associated with the Charleston Corner Notched forms at the St. Albans site was dated to 7900± 500 B.C. (Broyles 1971). Palmer points, which resemble Kirk points, have been dated to 7410± 100 B.C. at the Richmond Hill site on Staten Island, New York. Palmer projectile points predate the Kirk Corner Notched forms (Coe 1964).

If these arguments are valid, then the Kirk forms in the Gainesville Lake area may be dated from sometime around 7500 B.C. to sometime around 6500 B.C. The smaller Autauga-like projectile points may be earlier than the large Kirk Corner Notched points of Classes 137-139. Several of the Kirk Cluster forms, particularly Classes 140-142, resemble members of the Hardaway and Dalton Clusters. The future may supply relevant data and produce arguments about the function of this cluster. Such evidence is unavailable now.

Hardaway Cluster

The Hardaway Cluster in the Gainesville Lake area consists of two type-varieties based on Classes 148-150 and 155-156. The type Hardaway var. River Bend consists of Classes 148-150 and 156. These points have recurvate bases and expanding lateral haft element edges. The type Hardaway var. Unspecified consists of Class 155. It has recurvate basal edges, incurvate tapered shoulders, and incurvate expanding lateral haft element edges. This type has a simpler shape than the var. River Bend.

The Hardaway type was first described at the Hardaway site in North Carolina (Coe 1964). It was dated to sometime between 8000 and 6000 B.C. A resemblance of the Hardaway Side Notched projectile points to the Dalton and Meserve points was noted from the beginning (Coe 1964:64).

Dalton points occur in Tallahalla Reservoir in southeastern Mississippi (Atkinson and Elliott n.d.). Some of these resemble Hardaway Cluster points from the Gainesville Lake area. A Greenbriar point from the Clear Lake site in the upper central Tombigbee drainage is similar to Hardaway Cluster points from the central Tombigbee. If these similarities may be regarded as evidence of contemporaneity, we may suggest a chronology for the cluster to sometime between 8000 and 7500 B.C. in the Gainesville Lake area.

Big Sandy Cluster

The Big Sandy Cluster consists of Classes 152-154. The one type Big Sandy var. Big Sandy is a side notched projectile point with an expanding lateral haft element edge and incurvate to straight tapered shoulders. This point type has been found in the same stratum with Dalton types at Stanfield-Worley. This stratum has been dated to 9640±450 B.P. and 8920±400 B.P. (DeJarnette et al. 1962). It is a wellknown point type in northern Alabama and a local Big Sandy phase has been suggested (Walthall 1980).

Other point types which resemble Big Sandy points include Kessell Side Notched (Broyles 1971) and the Cache River type (Brain 1971). Kessel Side Notched projectile points have been dated to 7900±500 B.C. and are thought to predate the Kirk forms in the West Virginia area (Broyles 1971). Some Greenbriar projectile points from the Hester site resemble some Big Sandy forms (Brookes et al. 1974). Big Sandy projectile points may occur above Dalton types at the Hester site (Brookes 1979). Big Sandy points have been found in the same levels as Dalton points at the Tensaw Creek site in Lowndes County, Alabama (Chase 1966). Big Sandy points may occur where Daltons do not. The Big Sandy points replace the Dalton types through time (Griffin 1974). In any event, lacking any definite evidence, we may posit a chronology of sometime from 8000 B.C. to 7500 B.C. for these points.

Dalton Cluster

Dalton projectile points are represented by one type variety in the Gainesville Lake area. The type Dalton var. Cochrane consists of Classes 158-160. These are medium sized lanceolate forms with heavily serrated blade edges, with broad, incurvate expanding hafts, and no shoulders. These are similar to members of the Hardaway Cluster (Class 155) and the Kirk Cluster (Classes 140-142). They are very thin or flattened in cross section and finely serrated.

Dalton projectile points were named after examples first recovered in Missouri and have since been found in numerous localities. They resemble the Meserve-Plano tradition point types of the Plains. They have been called 'Transitional Paleo' in areas east of the Mississippi. They also resemble points including Quad, Beaver Lake, Cumberland and Clovis. Dalton points occur on uplands of Arkansas (Morse 1973), the coastal plain of Florida (Bullen 1975), the lower Mississippi Valley (Brain 1971), and the Carolina Piedmont (Coe 1964).

DeJarnette et al. (1962) and DeJarnette and Knight (1976) found Dalton projectile points in deeply stratified rock shelters such as Stanfield-Worley and LaGrange in north Alabama. At Stanfield-Worley the stratum containing the Dalton types was dated by radiocarbon methods to 9640±450 B.P. and 8920±400 B.P. Walthall (1980) has suggested, though, that the Dalton materials should date to sometime between 8000 and 7700 B.C.

Dalton points at Graham Cave in Missouri were dated to 7340±300 B.C. and 7520±400 B.C. (Crane and Griffin 1968). At Rodger's Shelter in Missouri, strata associated with Dalton points were dated to 10,530±650 B.P. and 10,200±330 B.P. (McMillan 1976).

Once again we accept the assumptions of these comparisons. Dalton var. Cochrane forms in the Gainesville Lake area could date to sometime between 8000 B.C. and 7500 B.C. or earlier. The similarities between the Dalton and some of the Hardaway and Kirk Cluster forms suggest a need to test our typological criteria and the cultural assumptions we impose upon them.

Lanceolate Paleo Cluster

The Lanceolate Paleo Cluster in the Gainesville Lake area consists of two types. The type Clovis var. Unspecified consists of Class 163. The type Beaver Lake var. Beaver Lake consists of Class 162. The Clovis type is fluted and has an incurvate base. The Beaver Lake form has recurvate blade edges and a recurvate base.

These types occur throughout the Eastern Woodlands (Cambron and Hulse 1964).

Localities associated with these points include: the Quad site (Soday 1954), the Wells Creek site (Dragoo 1973), the Bull Brook site (Byers 1954), the Williamson site (McCary 1951), the Debert site (McDonald 1968), the Plenge site (Kraft 1973), and the Shoop site (Witthoft 1953).

Radiocarbon dates associated with Paleo Indian occupations range from 10,000 B.C. to 8000 B.C. Meadowcroft rockshelter in Pennsylvania has produced dates between 10,850 B.C. and 14,255 B.C. (Adovasio et al. 1978: 643). These dates suggest a lanceolate point tradition dating from at least 10,000 years ago and we may posit a date of sometime around 9000 B.C. for these points in the Gainesville Lake area.

Thus, the classes generated in the analysis of the individual points are found to conform to a variety of previously recognized types, while suggesting some interesting directions for future research, particularly in evaluating the importance of variation within the type classes.

A CHRONOLOGY OF POINTS FOR THE CENTRAL TOMBIGBEE DRAINAGE

Using radiocarbon determinations, as well as cross-dated correlation with similar types from elsewhere, a chronological sequence of projectile point types may be posited. This sequence, for the Gainesville Lake area, is presented in Figure 33. Although we still have points of uncertainty during Archaic times, the Woodland Miller sequence is thought to be relatively complete. Although there are difficulties to correlating style with time, a generalized relative ordering is still possible. This is not to say that finer chronological control is impossible with larger samples, but this is an adequate presentation of our present knowledge.

Table 5. A Summary of the Associations of Each of the Projectile Point Clusters Established by this Study.

I. Late Woodland-Mississippian Triangular Cluster.

Madison var. Gainesville - Classes 1-3
Hamilton var. Gainesville - Classes 4-6, 16
Pickens Triangular var. Pickens - Class 10

II. Middle Woodland Tapered Shoulder Cluster

Tombigbee Stemmed var. Tombigbee - Classes 55, 57, 58
Tombigbee Stemmed var. Turkey Paw - Classes 56, 59-60

III. Lanceolate Expanded Haft Cluster

Mud Creek var. Greene - Classes 41-47, 49-50
Swan Lake var. Unspecified - Class 36
Baker's Creek var. Unspecified - Class 38

IV. Lanceolate Spike Cluster

Bradley Spike var. Craig's Landing - Classes 22-27
New Market var. Unspecified - Classes 28-29

V. Flint Creek Cluster

Flint Creek var. Tombigbee - Classes 65, 66, 67, 118, 119
Flint Creek var. Flint Creek - Classes 68-72
Flint Creek var. Unspecified - Classes 83, 84

VI. Wade Cluster

Wade var. Wade - Classes 79-82
Cotaco Creek var. Cotaco Creek - Class 73
Motley var. Unspecified - Class 74

VII. Little Bear Creek Cluster

Gary var. Tombigbee - Classes 91-92, 94-97
Gary var. Unspecified - Class 98
Little Bear Creek var. Little Bear Creek - Classes 101, 102
Little Bear Creek var. Gainesville - Classes 103, 104
Little Bear Creek var. Unspecified - Class 89
Mulberry Creek var. Unspecified - Class 105

VIII. Benton Cluster

Benton var. Benton - Classes 114-115

Table 5. (Continued).

IX.	Morrow Mt. White Springs Cluster
	White Springs var. White Springs - Class 128 Vaughn var. Vaughn - Classes 123-127 Demopolis var. Demopolis - Class 122
X.	Eva Cluster
	Eva var. Eva - Class 129
XI.	Bifurcate
	Class 130
XII.	Kirk Cluster
	Kirk var. Unspecified - Classes 131-135, 137-146, 151
XIII.	Hardaway Cluster
	Hardaway var. River Bend - Classes 148-150, 156 Hardaway var. Unspecified - Class 155
XIV.	Big Sandy Cluster
	Big Sandy var. Big Sandy - Classes 152-154
XV.	Dalton Cluster
	Dalton var. Cochrane - Classes 158-160
XVI.	Lanceolate Paleo Cluster
	Beaver Lake var. Beaver Lake - Class 162 Clovis var. Unspecified - Class 163
	Types, Varieties and Classes with no Cluster Designation Type and Variety Collins var. Collins Jack's Reef Corner Notched var. Jack's Reef - Class 32 Alba var. Unspecified - Classes 75, 76 Copena var. Copena - Class 40 McIntire var. Aliceville - Classes 110-111 McIntire var. Unspecified - Class 108 Elora var. Unspecified - Classes 77-78 Big Slough var. Unspecified - Class 116

In the chronological chart (Fig. 34) local styles are correlated with local cultural and historical integrative taxa. Bars show the known and suspected temporal distribution of each type-variety. An interrupted bar indicates suggested extensions of the variety into an earlier or later time period.

For the Archaic stage, some archaeological cultures have been named after a predominant projectile point type. They were so named to suggest a particular Archaic Coastal Plain adaptation. These are correlated with other Archaic cultures using horizon styles implicit in the projectile point clusters.

The Gainesville Lake area was once inhabited by people making Dalton cluster projectile points. A distinct variety, Cochrane has been found on two sites. One of these was extensively occupied. Therefore, we named the local Dalton manifestation the Cochrane archaeological culture.

The late Middle Archaic occupation of the Gainesville Lake area has been termed Vaughn after the Large Middle Archaic Vaughn midden mound just south of Columbus, Mississippi (Atkinson 1974). Local components of the Vaughn culture are represented on several sites within the lake area and are recognized on the basis of Vaughn *var. Vaughn* and Demopolis *var. Demopolis* projectile points. People using Vaughn points were the central Tombigbee Coastal Plain manifestation of a widespread late Middle Archaic culture (cf. Coe 1964, DeJarnette et al. 1962).

The name West Greene has been given to a sizable Late Archaic cultural manifestation found on many sites within the lake area. Most sites excavated contained a large number of the hafted points of the Little Bear Creek and Gary projectile point types. We have named these occurrences the West Greene archaeological culture as the Gainesville Lake area expression of the Southeastern Late Archaic period.

The other terms utilized are standard usage. Unfortunately, much more evidence will be necessary before we begin the task of archaeological phase and subphase definition for the Archaic stage.

SUMMARY OF RESULTS

The approach adopted in these analyses attempts to deal with various aspects of prehistoric lithic industries. The emphasis was on determining technological process as much as their chronology or cultural attribution. The result was an ordering of the assemblages and a determination of the spatial and temporal limits of various lithic forms and practices. Provenience was correlated with the ceramic sequence (as presented in Volume 2 of this series) and the general areal sequence of lithic types.

Ceramic analyses determined a series of relatively short-term occupations during the Miller II and Miller III phases. This permitted the isolation of discrete feature clusters attributable to the Middle Woodland and Late Woodland. Archaic assemblages (primarily Early Archaic) were isolated from the Woodland artifacts. These artifacts were analyzed microscopically to determine their function.

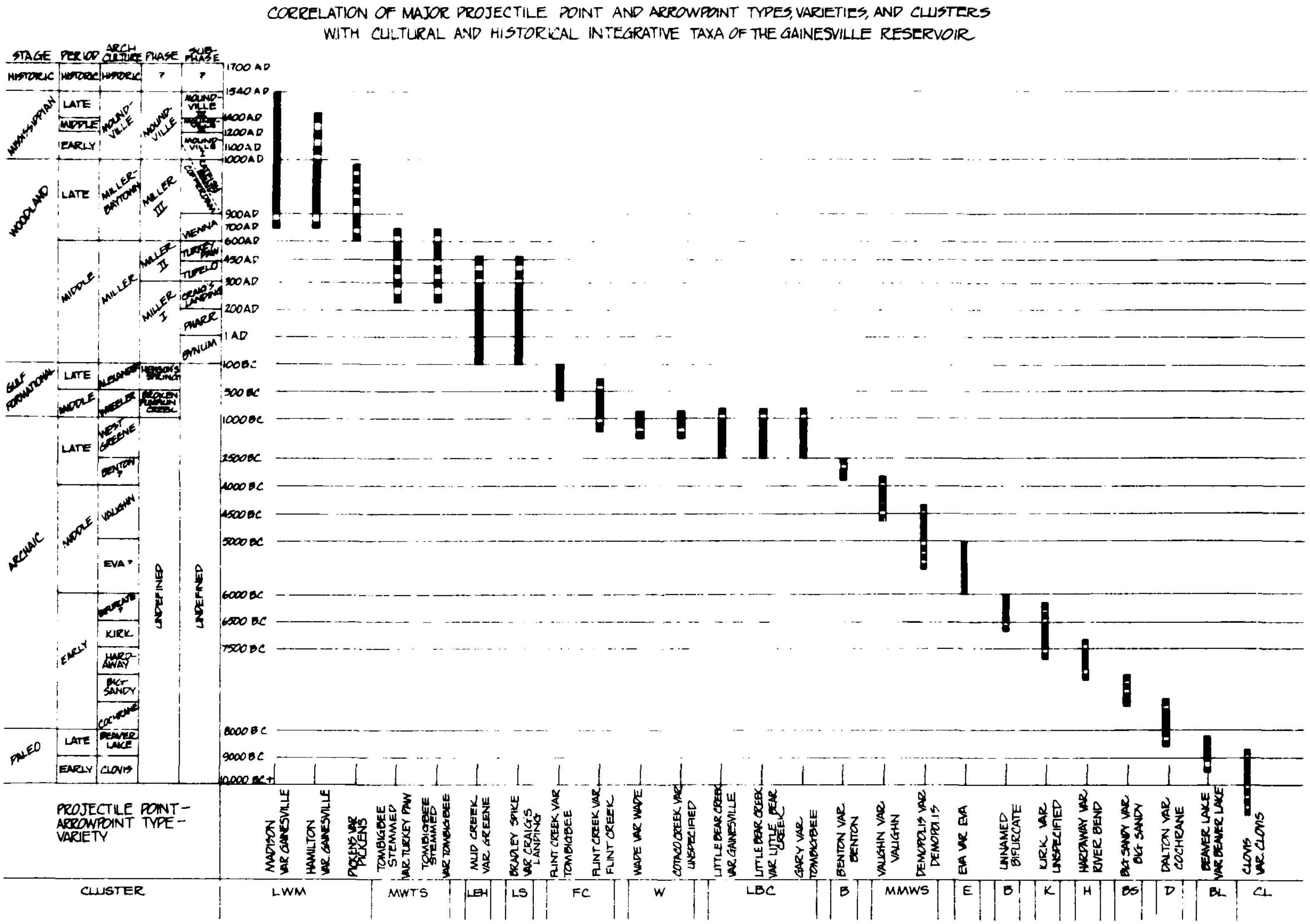

Figure 34. Correlation of Major Projectile Point and Arrow Point Types, Varieties and Clusters with Cultural and Historical Integrative Taxa of the Gainesville Lake Area.

A series of lithic reduction sequences were suggested for the Archaic, Middle Woodland, Late Woodland and Mississippian. Taken in combination with our discussion of the bipolar reduction process, the discussion of sequences suggests ways in which technology may be adjusted to the resources of an area. Although a re-distribution system (of indeterminate kind) supplies the area with stone from distant sources, the main sources of raw material were the smallish pebbles of the local gravel deposits.

The morphological analyses produced formal class definitions for each projectile point shape. The individual forms were combined to form clusters, types and varieties which were correlated with cultural and historical taxa at the local as well as regional and areal levels. Sixteen point clusters were isolated.

The research potential of these collections is only barely being realized. Believing that firmly substantiated culture history is a prerequisite for technological and use studies, we have been able to provide adequate temporal and spatial controls and it was possible to analyze the lithic material from a technological viewpoint. We have described the basic lithic technologies used in the lake area throughout prehistory. These sequences are useful. The determination of tool use has been more difficult, because this requires quality associational data as well as very precise quantitative and qualitative methods, including time consuming microscopic approaches (cf. Ahler 1979).

Ultimately, the potential for this collection in regard to use studies may be realized. The partial lithic assemblages isolated for the Turkey Paw subphase and Vienna, Cofferdam, Catfish Bend and Gainesville subphases appear to be candidates for detailed use studies. Such analysis could benefit from the extensive collections and the possibility of determining specific activity areas within the various sites.

For the present the descriptions presented here represent our best information about a very vital function in the prehistoric life of the area. Our analyses show that the Indians of the area at all times had a good practical knowledge of their local geography and its resources; that they were able to articulate with peoples elsewhere for the transportation of exotic materials from distant sources; that they utilized a number of reduction sequences and that these were utilized in reference to facilitating the process of redistribution or to allow the efficient reduction of the locally available materials; that the local technology depended on the heat treatment of chert materials; that such treatment permitted the production of even smaller flakes and the production of smaller points such as those we associate with bows; that a variety of techniques produced a variety of point forms; that these forms are comparable with other similar points found throughout the Southeast; and that as a result we were permitted to develop a local sequence integrated into the culture history of Eastern Woodlands.

The Gainesville Lake area prehistoric lithic materials may be seen in isolation or as an integral part of the areal culture history. We have attempted to give both perspectives.

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APPENDIX 1

GLOSSARY OF TERMS

Debitage

Flakes are pieces of stone intentionally removed from a parent mass which may have any size or shape. Flakes may be sub-divided into six categories. All of these different flake types form the debitage. Debitage is lithic material resulting from a knapping procedure and exhibiting force undulations, bulbs of percussions, remnants of a platform or platform preparation, and at least one smooth continuous surface. The different flake types are defined below.

Flake Categories

Primary Decortication Flake White (1963)
A flake with the dorsal surface completely covered with cortex.

Secondary Decortication Flake White (1963)
A flake whose dorsal surface is only partially covered with cortex.

Bifacial Thinning Flake
A flake with a platform, remnants of a platform or platform preparation. It usually has a curved, thin cross section when viewed from the side, and negative flake scars on the dorsal surface. There is no cortical material on the dorsal surface, though it may be on the striking platform. No attempt was made to separate these from flakes of bifacial retouch.

Blade-like Flake
A flake in which the length exceeds the width by a ratio of greater than 2 to 1 along the bulbar axis. The lateral edges are generally parallel. These flakes give no indication that they were removed from a prepared core.

Amorphous Flake
A thick, irregular flake which has no cortex. These may result from shearing or shattering during the chert knapping process.

Other Flakes
A flake which meets none of the above criteria and is neither amorphous or bladelike. These are generally flattened in lateral cross section, may contain negative flake scars on the dorsal surface but there is no indication of either platform or platform preparation. The dorsal surface has no cortex.

These flake categories were designed to describe the reduction of cobble pebble materials since this was by far the most common siliceous material used. Primary decortication flakes are the first to be removed. Secondary decortication flakes are the next flakes removed. The bifacial,

other, and amorphous flakes would result from the later stages of reduction. This simplification does not always hold true. If thermal reduction was employed, the heat spalls produced would retain few surfaces with cortex. Therefore, flakes removed from the interior, though removed first, would have no cortex. This classification of debitage is useful only in describing the products of intact cobbles which had not first been thermally reduced. This method may account for over 75 percent of the debitage produced, and these categories describe the by-products of different stages of tool manufacture with varying accuracy.

Flaked Stone

Flaked stone refers to all siliceous material with regular, intentional or use flake blade removals from any surface or edge. Modification occurs two ways: manufacture modification is the result of intentionally reducing siliceous materials by knapping; use modification results from use. Wear patterns occur from that use (cf. Ahler 1975), usually in the form of small, localized flake blade scars. Large areas of regular use wear removals are occasionally present on thin flake margins.

Unifacial and Bifacial Flaked Stone Categories

Hafted End Scraper (Figs. 35, 40).
Small, steep edged flake tools with a transverse working edge perpendicular to the flake axis. The edge angle is generally greater than 50°. Hafting modification is evident on the lateral flake edges, opposite the working edge.

Cobble Scraper (Figs. 35, 40).
An edge trimmed cobble flaked along the margin(s) to produce working edge(s) of various lengths and extent. Edge angle is generally greater than 50° and less than 75°. Wear patterns consist of step flaking and minute crushing on one tool face only, opposite the direction of tool movement. Generally less than 25 percent of the cortical material has been removed to produce the working edge (25-50 percent removal may also occur). Secondary retouch is rare.

Flake Scraper (Figs. 35, 40).
A flake worked to produce a working edge(s) either transversely and/or parallel to the long axis of the flake. Edge angle is generally greater than 50° and less than 75°. Use attributes are present on one tool face only, opposite the direction of tool movement. Step flaking, crushing and edge rounding may occur on this face. There is little evidence of haft modification. Some secondary retouch may occur.

Thermal Spall Scraper (Figs. 35, 40).
A thermal spall manufacture modified to create a working edge along one or more margins. The edge angles are generally greater than 50° and less than 75°. Use attributes include step flaking and edge crushing on one tool face only, opposite the direction of tool movement during use. Some secondary retouch may occur.

Cobble Knife (Figs. 35, 40).

An edge trimmed cobble with one or more acutely angled working edges. Edge angles are generally less than 50° but greater than 25°. Use attributes may be present on both faces of the working edge as well as the edge itself. These usually take the form of overlapping step flaking, edge crushing and blunting. Generally less than 50 percent of the cortical material has been removed in the manufacture of the tool. Retouch is not common although it is more frequent on these acute edged specimens than on steep edged scrapers.

Flake Knife (Figs. 36, 40).

A flake manufacture modified to create a working edge(s) generally parallel to the long axis of the flake. The edge angle is acute, generally less than 50° but greater than 25°. Use attributes in the form of step flaking and edge crushing may occur on one or both faces of the working edge. Some of these are secondarily retouched.

Thermal Spall Knife (Figs. 36, 40).

A thermal spall manufacture modified to create a working edge(s). The edge angle is acute, generally between 25° and 50°. Use wear includes step flaking and edge crushing. Wear may occur on either face of the tool edge. Some may be secondarily retouched.

Cobble Scraper/Knife (Fig. 36).

Cobble scraper/knives are manufacture modified cobbles with working edge(s) usable for either scraping or cutting. Where one edge segment is acute angled and the other steep, a dual use may be suggested. Most have a single edge whose angle would be suitable for multiple uses. Edge angles generally falls between 35° and 65° but vary. Secondary retouch, where present, often serves to straighten an edge and eliminate jagged edges. Wear patterns are similar to knife or scraper categories.

Flake Scraper/Knife (Figs. 36, 37, 40).

Flake scraper/knives are manufacture modified flakes with working edges usable for either scraping or cutting. Thus, in the case where one working edge segment is acute angled and another steep, a dual use is suggested. Most have a single edge whose angle would be suitable for multiple uses. Edge angles vary, but generally fall between 35° and 65°. Secondary retouch, when present, often seems to straighten an edge and eliminate jagged edges. Wear patterns consist of use attributes similar to those of the knife or scraper categories.

Thermal Spall Scraper/Knife (Fig. 37).

This is a manufacture modified thermal spall with a working edge(s) usable for either scraping or cutting. The edge angle morphology resembles that of the cobble and flake scraper/knife categories. Edge angles are generally between 35° and 65°. Wear patterns are similar to those of the knife or scraper categories.

Blank (Fig. 37, 40).

A blank is an unfinished piece of raw material, representing an intermediate stage in the production of a stone tool. They are thick and possess irregular, large flake scars. The thinning process was halted by some type of transverse snap or hinge fracture.

Perforator (Figs. 38, 40).

A perforator is a flake or thermal spall manufacture modified by pressure flaking to produce a short, narrow, rod-like tip. They show no modification for hafting and were probably hand held. Most of the perforators have steep lateral edges along the tip produced by pressure flaking from the ventral surface. Some may have also been used as light scrapers, but distinguishing use wear from manufacture modification is difficult.

Reamer (Figs. 38, 41).

A flaked tool, thick-trianguloid in cross section and rod-like in form. These specimens show blunting and lateral edge crushing along with a transverse working edge suitable for penetration. These are separated from drills (intuitively) on the basis of size and the amount of wear along the lateral margins. Reamers are thicker and generally larger than drills. They were hand held and probably used in a back and forth rotary manner produced by twisting the tool with the hand.

Gouge-Chisel-Wedge (Figs. 38, 41).

A flaked stone tool with a steep transverse working edge suitable for penetrating hard substances. They are generally longer than they are wide and thick in cross section. Many show battering along one face of the working edge in the form of edge crushing and step flaking. Edge angles are generally steep and greater than 50°.

Chopper (Figs. 39, 41).

Large, crude tools with steep, broad working edges. These were made by several alternate percussion blows to the edge of the cobble. The working edge has an angle of greater than 75° in most cases and may have severe crushing and step flaking along that edge. Little secondary retouch occurs on these.

Adze (Figs. 39, 41).

An elongate, transverse edged tool suitable for scraping and planing. The edge angle is generally steep, from 50°-75° and the end opposite the bit is either modified or suited for hafting. These artifacts may be flaked over all of both the dorsal and obverse surface. The working edge may be straight, slightly convex, or concave, when viewed laterally. Wear, usually confined to one surface, is in the form of step flaking, crushing, and striations.

Bifacially Flaked Implements

Projectile Point (Figs. 15, 33).

A medium to large bifacially flaked, hafted tool whose form suggests use as a tip of a projectile and/or cutting device.

Arrow Point (Figs. 11, 14, 16, 33).

A (small) bifacially flaked, hafted tool whose form suggests use as a tip of a projectile.

Other Knife Biface (Fig. 36).

Fragmentary or whole knives whose blank or preform configuration is indeterminate. The edge morphology is similar to other knife categories.

Secondary reduction has eliminated all traces of cortical material. These may be secondarily retouched and retain macroscopic evidence of use as a cutting tool, such as step flaking and crushing.

Other Scraper Biface (Fig. 35).
Fragmentary or whole scrapers with the same edge configuration as the other scraper categories. These have been secondarily reduced so much that the original form of the blank has been erased. Evidence of use includes step flaking and crushing of the edge and face opposite the direction of force.

Hafted Drill (Fig. 37).
A thick rod-like biface with a transverse working edge. The transverse working edge is in the form of a long, rodlike bit, much longer than it is wide. The end opposite the working edge shows modification for hafting, usually in the form of an expanding proximal end. Wear evidence includes lateral edge crushing and step flaking as well as tip rounding, crushing and blunting.

Other Drill (Fig. 37).
A proportionally thick rod-like biface with one or more transverse working edges. Although some of these may have been hafted, no clear modification for such a purpose is present. Wear evidence includes lateral edge crushing and step flaking as well as tip rounding, crushing, and blunting.

Drill Fragment (Fig. 37).
A thick rod-like biface which is broken, eradicating evidence for hafting or morphology. These are drill bit fragments and may show wear similar to other drills.

Arrow Point Preform (Fig. 38).
Relatively thick but small bifacially flaked thermal spalls, flakes, or cobbles, trianguloid to oval in outline, with irregular flake scars across both surfaces. Edges are jagged. They show little evidence of use and may possess transverse fractures and/or hinge fracture terminations which prevented further reduction. In the reduction sequence these derive from blanks in preparation of the finished tool.

Projectile Point Preform (Fig. 38).
A relatively thick, medium to large, bifacially flaked trianguloid to oval shaped implement with large irregular flake scars extending across both faces of the implement. The edges are irregular with no evidence of utilization. Occasionally flake scars terminate in hinge fractures and sometimes a transverse fracture occurs along such a termination. In the reduction sequence these derive from blanks in preparation of the finished tool.

Notched Flake-Spokeshave (Fig. 39).
A flake or heat spall with a small, narrow intentional edge concavity. The concavity may show use in the form of step flaking and edge crushing.

Microlith (Fig. 39).
A (small) bifacial bladelet (usually a drill or drill preform).

Unidentifiable Biface (Fig. 39).

A bifacially flaked tool fragment so severely broken or damaged that function is no longer determinable.

Unifacially Flaked Implements

Graver (Fig. 41).

A flake or thermal spall with a short, thin projection produced by pressure flaking. This projection may be suitable for etching or graving. Wear occurs on the graver tip in the form of crushing.

Unidentifiable Uniface (Fig. 42).

An unifacially flaked tool fragment so broken that identification is impossible.

Cores and Use Modified Material

Primary Cobble Core (Fig. 43).

A cobble modified for the purpose of producing flakes or blades usable in the production of tools, or usable in their unaltered state as tools.

Secondary Cobble Core (Fig. 43).

These resemble primary cobble cores but the cobble is split into pieces and used as a flake source.

Thermal Spall Core (Fig. 43).

A thermal spall modified for the purpose of producing flakes or blades used to produce tools or flakes usable as tools.

Bipolar Core (Fig. 43).

A (primary or secondary) core, produced by a bipolar technique.

Blade Core (Fig. 43).

A (primary or secondary) core with blade scars originating from one or more platforms.

Secondary Outcrop Core (Fig. 43).

A core made from a primary flake blank. In this case, large cores produced at quarry sites serving as primary cores. Primary flake blanks produced from these would serve as secondary flake sources.

Psuedo-Burin Spall (Fig. 43).

Small fragments removed from bipolar cores, burin-like in form with one or more battered tips and faceted surfaces from previous spall removals. Some may have been used.

Utilized Flake (Fig. 42).

A use modified flake, usually thin in lateral cross section, with one or more edges marked by irregular, jagged edges, regular localized flake scars or short extensive regular flake scars.

Utilized Blade (Fig. 42).
Utilized flakes whose length is twice the width. Flake scars on the dorsal surface indicate removal from a prepared core.

Utilized Cobble (Fig. 42).
A use modified cobble exhibiting irregular flake scars, grinding, smoothing, polishing, pecking, etc.

Utilized Core (Fig. 42).
A core modified to another purpose after it served its original function.

Utilized Thermal Spall (Fig. 42).
A thermal spall exhibiting regular flake scars from a surface or edge.

Multiple-Direction-Right-Angled Uniface Cobble (Fig. 41).
Bipolar produced cobble tools which have been turned and battered from two or more directions creating ridges (platforms) intersecting at right angles. The battering produced during the manufacture of these tools makes use wear difficult to recognize.

Splintered Wedge (Fig. 42).
A bipolar produced wedge-rectangular shaped core tool characterized by concave working edges and opposed battered platforms.

Ground Stone

Ground Stone refers to all manufacture and use modified stone produced by grinding, pecking and polishing. These are usually made from non-conchoidally fracturing material.

Hammerstone (Fig. 44).
A rounded cobble-pebble (usually water-worn) with localized battering on any surface or edge. This wear is produced through repeated use of the stone.

Anvilstone (Fig. 44)
A stone used as a base for chert knapping or other activities. Otherwise smooth, flat surfaces are broken by irregular depressions, troughs and a general pecked appearance.

Muller (Fig. 45).
A medium to large grinding stone with at least one smooth flat or slightly convex ground surface. Wear occurs as grinding along this surface.

Metate (Fig. 45).
A large grinding stone with at least one large slightly convex to deeply concave ground surface. Wear includes extensive grinding, pitting and pecking.

Pitted Stone (Fig. 46).

A cobble-pebble or flat piece of rock with one or more well defined depressions on the surface. These pits or depressions vary in both depth and breadth but generally show evidence of pecking and grinding. The cup-shaped depressions are generally less than 15 mm in depth and 30 mm in diameter.

Combination Pitted Stone/Muller (Fig. 46).

These are mullers with one or more depressions characteristic of pitted stones. This suggests a tool used both as a grinder and as an anvil.

Abrader (Fig. 46).

A piece of stone with localized areas of grinding and smoothing. The wear may be in the form of deep, elongated grooves or in broad, shallow, elliptical expanses of abrasion.

Adze (Fig. 46).

An adze-form whose transverse bit has been pecked and ground into shape.

Axe (Fig. 47).

A tool with a broad transverse bit and grooves for hafting upon opposing faces.

Celt (Fig. 47).

These are elongated lenticular cross sectioned tools with a biconvex transverse bit. There is a tapering poll or butt section. The bit may show wear in the form of battering or smoothing. Occasionally the butt will be modified for hafting. These artifacts are frequently highly polished and made of greenstone.

Discoidal (Fig. 48).

A circular, biconvex piece of stone pecked and ground into shape. This class includes preforms as well as finished discoidals. Although quartzite examples exist they are rare. Most are of non-conchoidally fracturing material.

Sandstone Bowl Fragment (Fig. 48).

A sandstone sherd from a sandstone bowl. These are fairly thick and retain chisel marks and other traces of manufacture on the outer surfaces.

Steatite Bowl Fragment (Fig. 48).

A steatite sherd from a steatite bowl. These are fairly thick and retain chisel marks or other traces of manufacture on the outer surfaces.

Gorget Fragment (Fig. 48).

A highly polished piece of ground stone with a perforation(s) drilled through the center for the purpose of attachment. These are trianguloid in cross section and appear to be two-holed.

Sandstone Saw (Fig. 48).

A thin, elongated piece of sandstone with an acute working edge. The edge shows wear in the form of jagged flake removals and grinding runs parallel to the working edge.

Combination Anvil Stone/Muller (Fig. 48).

A muller with irregular troughs and other pecked areas in combination with a smooth grinding surface.

Ground and/or Polished Hematite (Fig. 49).

A piece of hematite ground or polished to produce at least one smooth surface.

Unidentifiable Ground Stone (Fig. 49).

Pieces of rock, usually of a non-conchoidally fracturing kind, with evidence of grinding, pecking or polishing. These are very fragmentary and worn.

SOME TECHNICAL TERMS USED IN THE ANALYSES

Bifacial - Bifacial retouch is retouch worked on both surfaces of an object, covering each surface partially or totally. (Tixier, 1974)

Bulbar-Ventral Surface - The fracture plane formed by the shock wave of the striker inside the core, which separates the flake (blade or bladelet) from the core. (Tixier, 1974)

Continous Retouch - Retouch in an uninterrupted line, occupying all or a considerable part of one or both edges of a piece is said to be continuous. (Tixier, 1974)

Core - Block of raw material from which flakes, blades, or bladelets are detached. (Tixier, 1974)

Cortex - Natural surface or rind, on flint-like materials. (Crabtree, 1972)

Crazing - Minute surface cracks, generally cross-hatched, causing the surface to be weakened. Common to over-heated siliceous mat[illegible]als. (Crabtree, 1972)

Debitage - The intentional action of breaking a block of raw material (hard rock) in order to use the products (flakes, blades, bladelets) as they are, or to convert these products into tools by retouch. The term debitage also applies to the by-products of this action. (Tixier, 1974)

Dorsal Surface - The surface opposite the ventral surface. It can be partly or totally a natural surface. Usually, however, the dorsal surface has traces of previous removals, bounded by ridges. (Tixier, 1974)

Flake - Fragments of hard rock intentionally detached from 1) a core in the course of preparing or rejuvenating it (core preparation or core

rejuvenation flake), 2) a core with the intention of later turning it into a tool by retouching it (blank), 3) a tool in the course of shaping it by retouch (retouch flake). (Tixier, 1974)

Hinging - Said of a flake, blade, bladelet, or burin spall in which the fracture plane, normal on the proximal end, turns abruptly up at the distal end, away from the centre of the core or burin. The run of the flake, blade, bladelet, or burin spall is thus stopped short, leaving the characteristic smoothly rounded tip on the distal end of the piece, and an equally characteristic 'hook' on the core or burin. (Tixier, 1974)

Industry - The action of man on material in order to transform it. (Tixier, 1974)

Percussion Flaking - A method of striking with a percussor to attach flakes or blades from a core or mass. (Crabtree, 1972)

Pot Lid - A plano-convex flake leaving a concave scar. Pot lids are the result of differential expansion and contraction of isotropic material but are minus the compression rings of force lines usually associated with these conditions. (Crabtree, 1972)

Pressure Flaking - Process of forming and sharpening stone by removing surplus material in the form of flakes from the artifact by a pressing force rather than by percussion. (Crabtree, 1972)

Retouch - To shape, sculpt, or transform a product of debitage into a tool, either by percussion (direct, indirect, on an anvil, etc.) or by pressure flaking. (Tixier, 1974)

Serrating - Indenting the edges by alternating the removal of flakes; or the repeating of notches at regular intervals. (Crabtree, 1972)

Striking Platform - The part of a core upon which one strokes in order to detach a flake, blade, or bladelet. (Tixier, 1974)

Thinning flakes - Flakes removed from a preform either by pressure or by percussion to thin the piece for artifact manufacture. (Crabtree, 1972)

Uniface - Artifact flaked on one surface only. (Crabtree, 1972)

Unifacial - Objective piece bearing flake or blade scars on one surface only. (Crabtree, 1972)

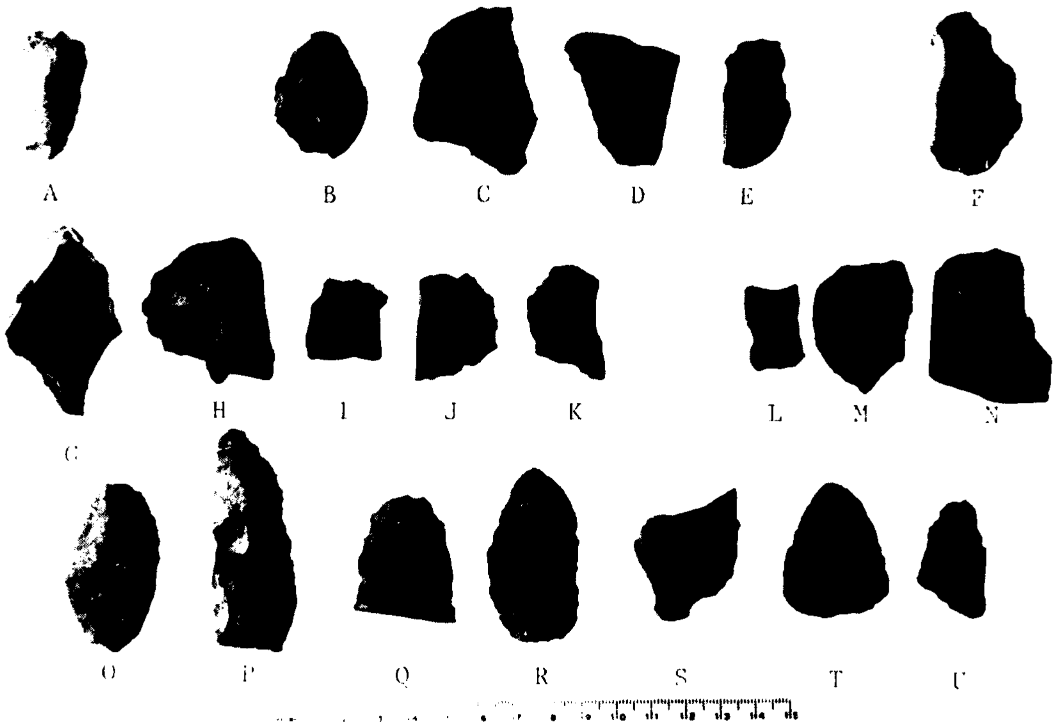

Figure 35. Biface Hafted End Scraper, A (Site 1Gr2); Biface Cobble Scrapers, B-E (Site 1Pi61); Biface Flake Scraper, F (Site 1Pi61); Biface Thermal Spall Scrapers, G-K (Site 1Pi61); Biface Other Scrapers, L-N (Site 1Pi61); Biface Cobble Knives, O-U (Site 1Pi61).

Figure 36. Biface Flake Knives, A-C (Site 1Pi61); Biface Thermal Spall Knives, D-H (Site 1Pi61); Biface Other Knives, I-M, Q-T (Site 1Pi61); Biface Cobble Scraper/Knives, N-O (Site 1Pi61), P (Site 1Gr2).

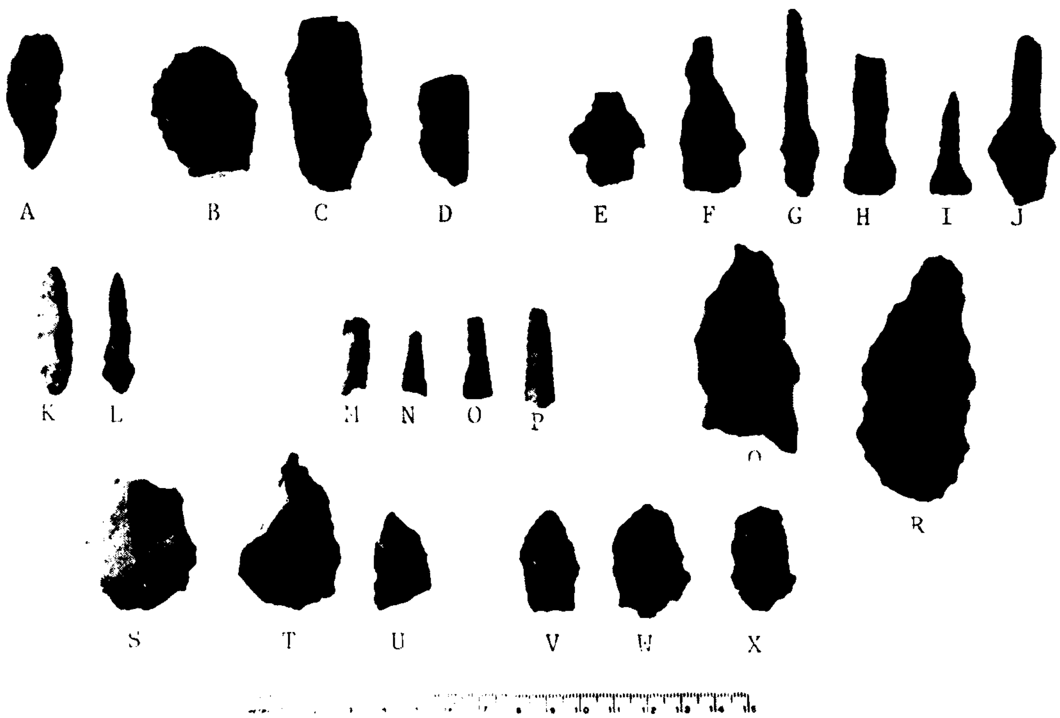

Figure 37. Biface Flake Scraper/Knives, A (Site 1Pi61); Biface Thermal Spall Scraper/Knives, B-D (Site 1Pi61); Biface Hafted Drill, E (Site 1Pi61), F-H, (Site 1Gr2), I-J (Site 1Pi61); Biface Other Drills, K-L (Site 1Pi61); Biface Drill Fragments, M-N (Site 1Pi61), O-P (Site 1Gr2); Biface Blanks, Q-U (Site 1Pi61), V-X (Site 1Gr2).

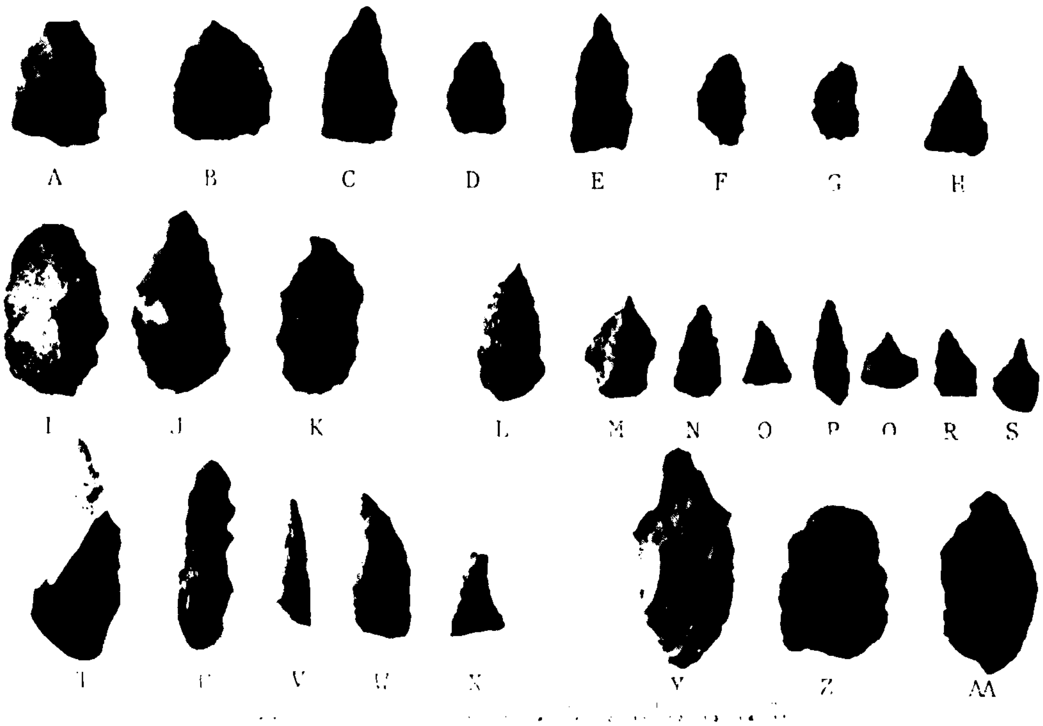

Figure 38. Biface Arrow Point Preforms, A-F (Site 1Pi61), G-H (Site 1Gr1x1); Biface Projectile Point Preforms, I (Site 1Gr2), J-K (Site 1Pi61); Biface Perforators, L-R (Site 1Pi61), S (Site 1Gr2); Biface Reamers, T-V (Site 1Gr2), W-X (Site 1Pi61); Biface Gouge-Chisel-Wedges, Y-AA (Site 1Pi61).

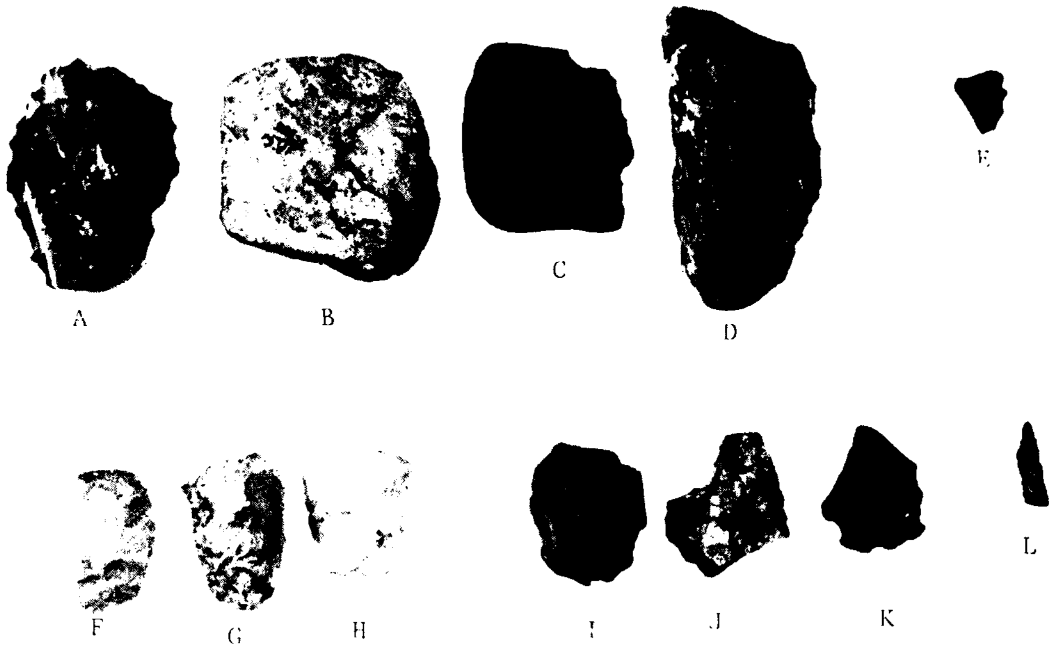

Figure 39. Biface Choppers, A-D (Site 1Pi61); Biface Notched Flake/Spokeshave, E (Site 1Gr1x1); Biface Adzes F-H (Site 1Pi61); Unidentifiable Biface Fragments, I-K (Site 1Pi61); Biface Microlith, L (Site 1Gr2).

Figure 40. Uniface Hafted End Scraper, A (Site 1Gr1x1); Uniface Cobble Scrapers, B-E (Site 1Pi61); Uniface Flake Scrapers, F (Site 1Pi61), G (Site 1Gr1x1); Uniface Thermal Spall Scrapers, H-L (Site 1Pi61); Uniface Cobble Knife, M (Site 1Pi61); Uniface Flake Knife, N (Site 1Gr1x1); Uniface Thermal Spall Knives, O-P (Site 1Pi61); Uniface Flake Scraper/Knife Q (Site 1Gr1x1); Uniface Blank, R (Site 1Gr1x1); Uniface Perforators, S-V (Site 1Pi61), W-X (Site 1Gr1x1).

Figure 41. Uniface Gravers, A-B (Site 1Gr1x1); Uniface Reamer, C (Site 1Gr2); Uniface Gouge-Chisel-Wedges, D-E (Site 1Pi61), F (Site 1Gr2); Uniface Choppers, G (Site 1Gr50), H (Site 1Pi61); Multiple Direction Right Angle Uniface Cobble, I (Site 1Gr2); Uniface Adzes, J-L (Site 1Pi61).

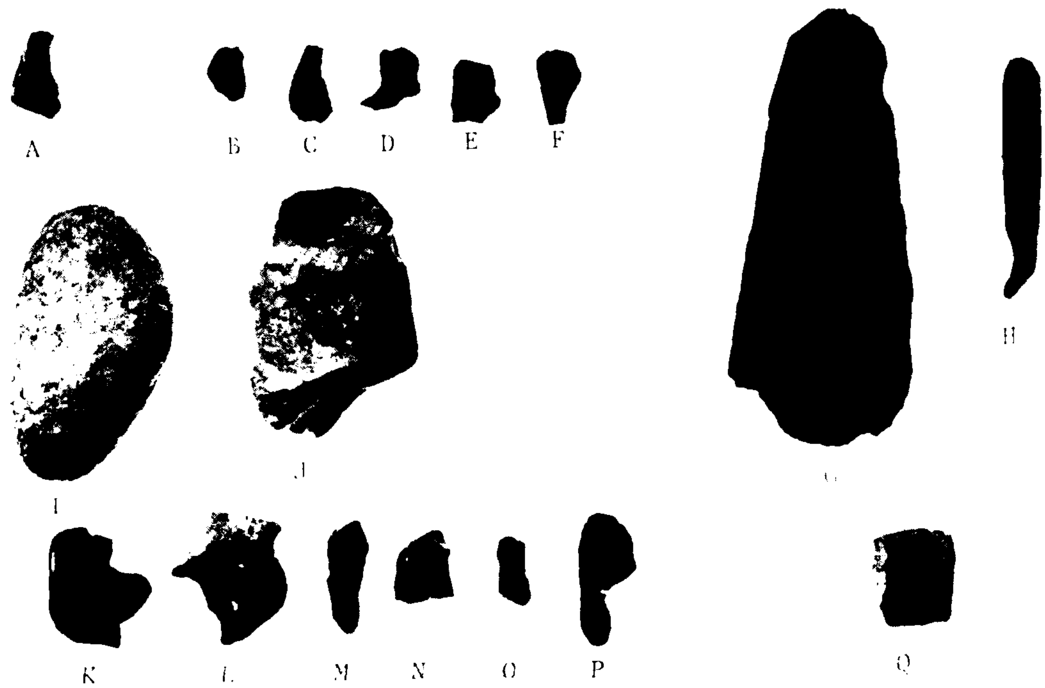

Figure 42. Unidentified Uniface, A (Site 1Pi61); Utilized Flakes, B-F (Site 1Pi61); Utilized Blades, G (Site 1Pi61), H (Site 1Gr1x1); Utilized Cobble, I (Site 1Gr2); Utilized Core, J (Site 1Pi61); Utilized Thermal Spalls, K-P (Site 1Pi61); Splintered Wedge, Q (Site 1Gr1x1).

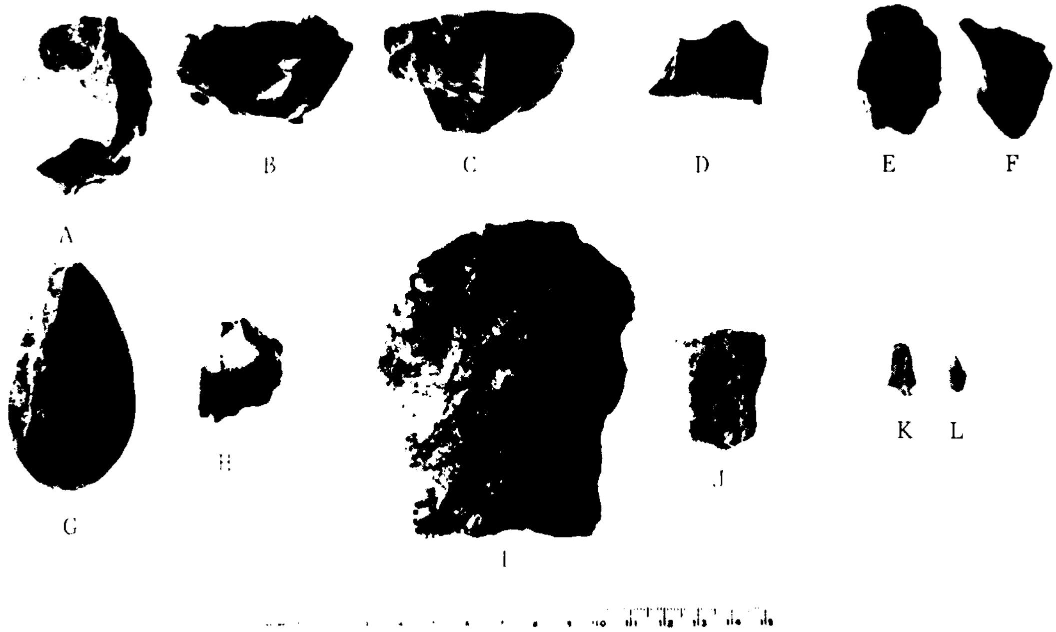

Figure 43. Primary Cobble Cores, A-C (Site 1Pi61); Secondary Cobble Core, D (Site 1Pi61); Thermal Spall Cores, E (Site 1Pi61), F (Site 1Gr2); Bipolar Core, G (Site 1Gr50); Blade Core, H (Site 1Gr2); Secondary Outcrop Cores, I (Site 1Su17), J (Site 1Gr1x1); Pseudo Burin Spalls, K-L (Site 1Gr1x1).

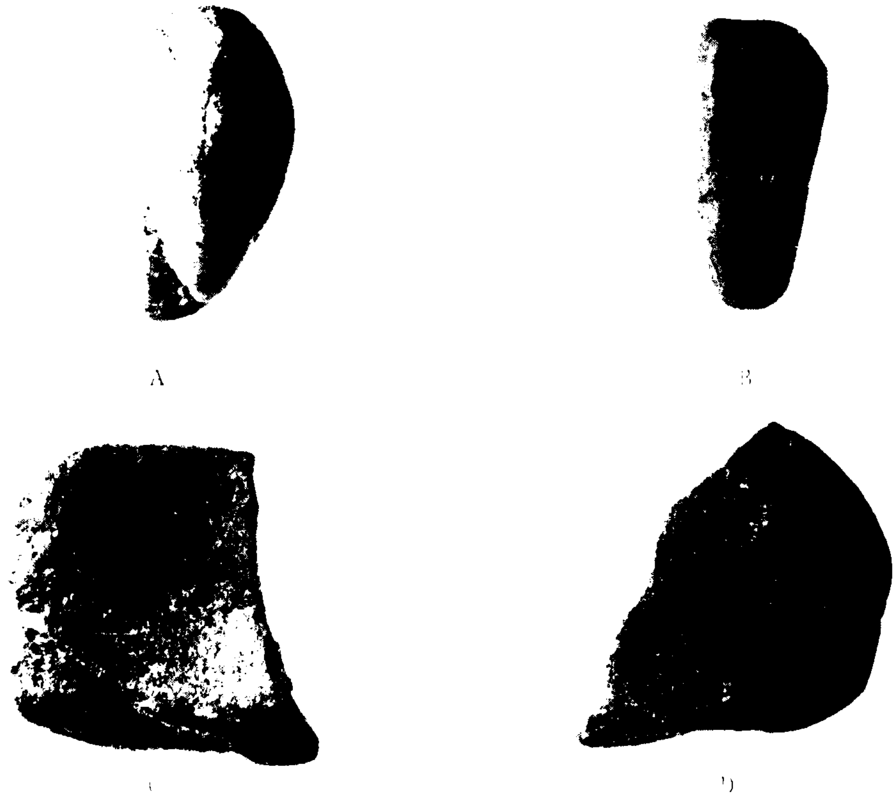

Figure 44. Hammerstones, A-B (Site 1Pi61) Anvil Stones, C (Site 1Gr50), D (Site 1Pi61).

Figure 45. Mullers, A (Site 1Gr2), B (Site 1Pi61); Metate, C (Site 1Pi61).

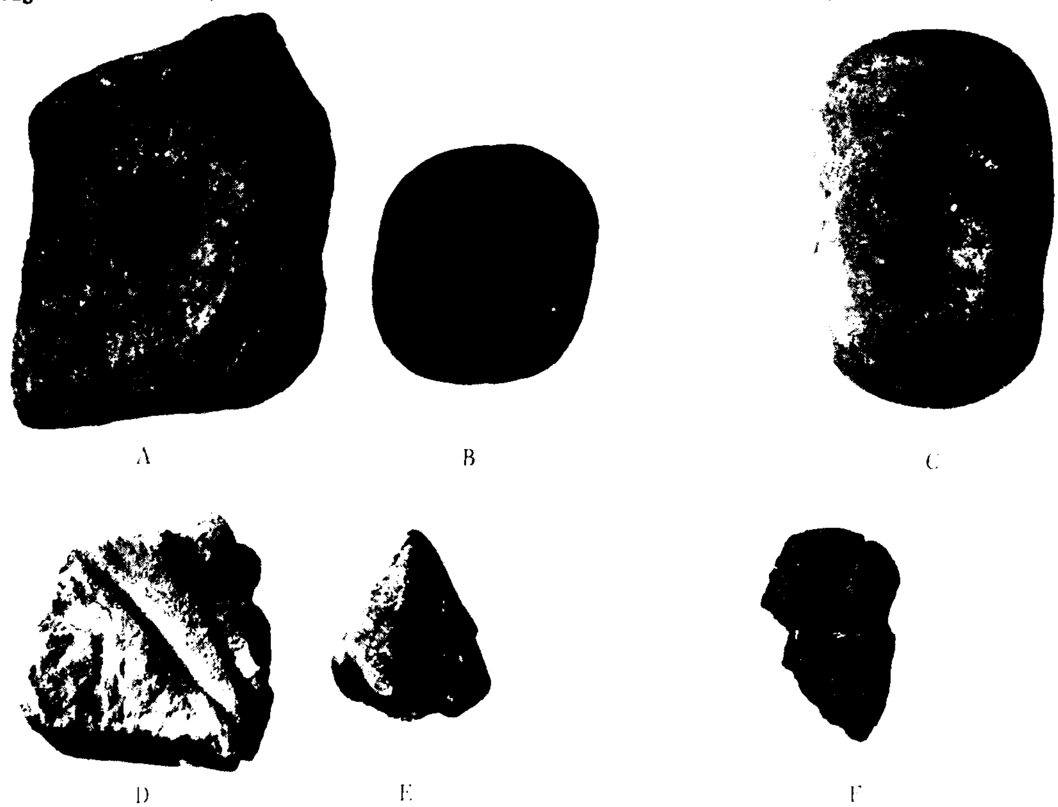

Figure 46. Pitted Stones, A (Site 1Gr2), B (Site 1Gr50); Combination Pitted Stone/Muller, C (Site 1Pi61); Abraders, D-E (Site 1Pi61); Adze, F (Site 1Gr1x1).

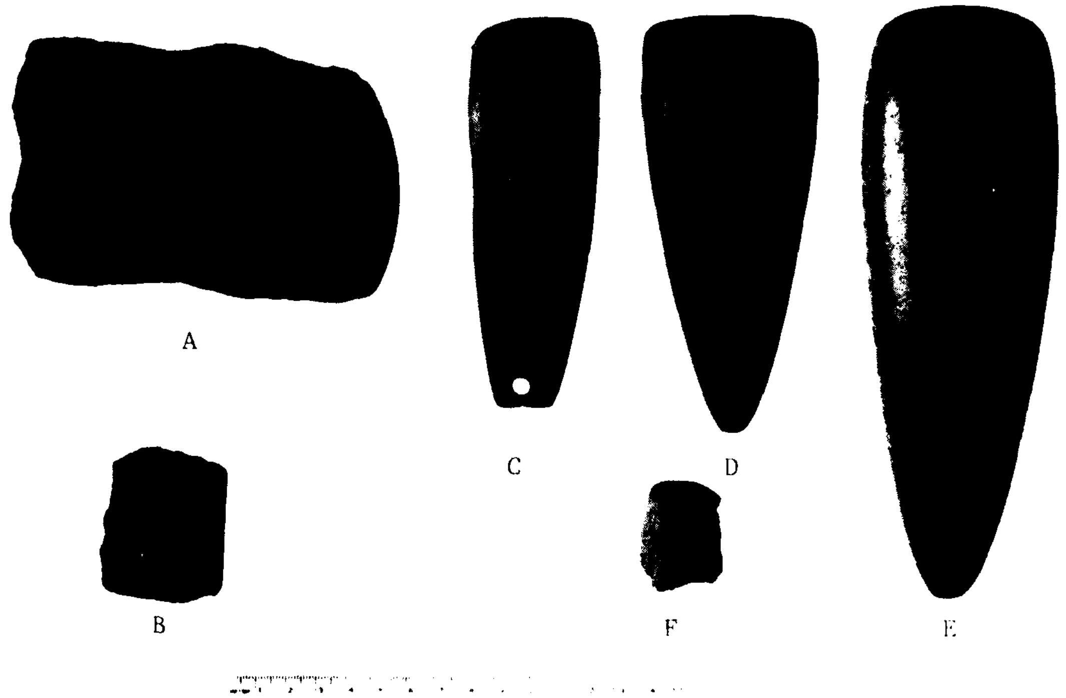

Figure 47. Axes, A (Site 1Pi33), B (Site 1Pi61); Celts, C (Site 1Pi33, Burial 15), D (Site 1Pi61, Burial 19), E (Site 1Pi61, Burial 27), F (Site 1Pi61).

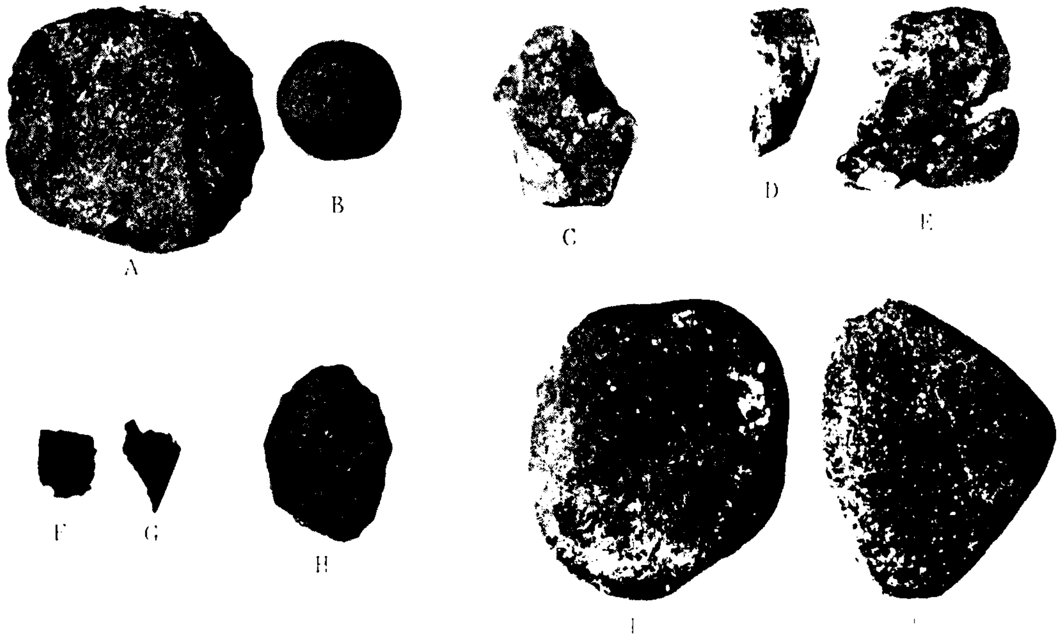

Figure 48. Discoidals, A (Site 1Pi33), B (Site 1Pi61); Sandstone Bowl Fragment, C (Site 1Grlxl); Steatite Bowl Fragments, D (Site 1Grlxl), E (Site 1Gr50); Gorget Fragments, F-G (Site 1Gr2); Sandstone Saw, H (Site 1Grlxl); Combination Anvilstone/Mullers, I (Site 1Gr2), J (Site 1Pi61).

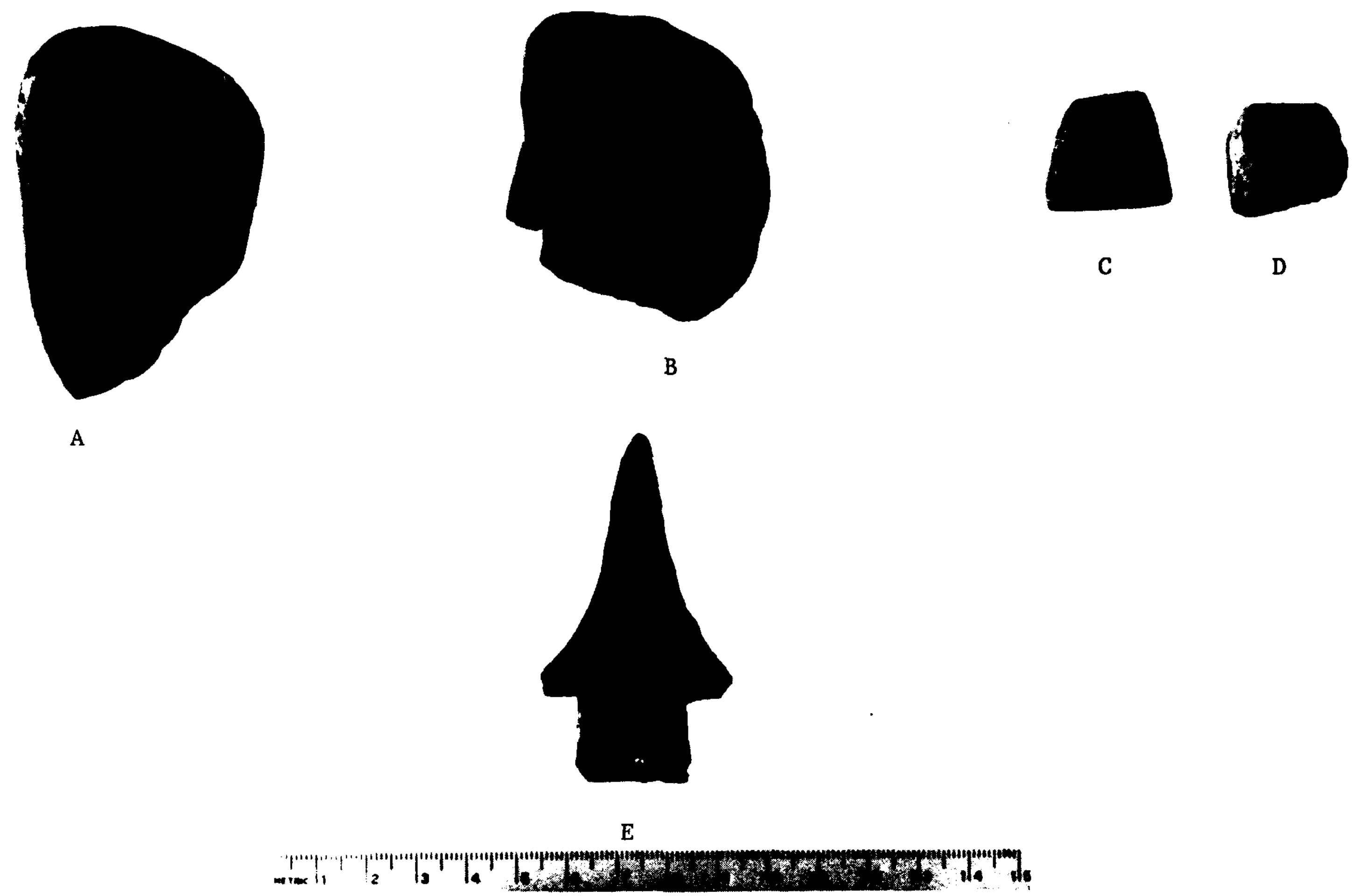

Figure 49. Ground and Polished Hematite, A (Site 1Pi33, Burial 20 B & C); Unidentifiable Groundstone, B (Site 1Gr1x1); Ground Galena Cubes, C (Site 1Pi33, Burial 20 C); D (Site 1Pi33, Burial 28 A); Copper Pendant, E (Site 1Pi33, Burial 20 B & C).

APPENDIX 2

THERMAL ALTERATION EXPERIMENTS

At 1Pi33 small pits filled with fire-cracked chert occur with the Late Woodland and Mississippian occupations (Coblentz, Personal Communication). These may be thermal reducing or alteration facilities. If so, it suggests an important technological process. It also leads us to speculate upon the condition of some stone material which appears different than that in a natural state.

Chert found in the gravel bars was often of a different color from that found in archaeological sites. Such color change could be a secondary effect associated with the heating of chert by prehistoric stoneworkers to effect change in the stone useful to the manufacture of stone tools. If this assumption could be proven correct we could identify the origins of these variant colored materials, as well as identifying technological process. Since color change was associated with heating, we should be able to determine whether a thermal technique was utilized and whether such use or the temperature utilized had a definite cultural association. This argument has been attempted before and there is a developing literature (cf. Anderson 1977, Purdy 1975, Gillespie 1977, Futato 1978).

With this as a background we decided to institute an experiment routine which might permit us to duplicate the condition of the archaeological specimens and thus sustain our hypotheses in addition to supplying a useful set of data.

The Experiment

A haphazard collection of rocks was made at four gravel bars on the Tombigbee River between Vienna Landing and Lubbub Creek. We tried to find specimens of all sizes, textures and colors. Eventually, 12 of these rocks were subjected to heating: 3 came from locale 1, 3 from locale 3, 2 from locale 4, and 4 from locale 5. The stones were selected haphazardly, but each cobble was broken into five pieces using a hard hammer and anvil. One piece from each sample was kept as a control while the remaining pieces were heated for six hours at temperatures of 250°C, 300°C, 350°C, and 400°C. The stones were placed directly into an electric glazing kiln with no heat transfer medium other than air. Temperature was increased some /5° every 15 minutes until the desired temperature was attained. Variation was limited to ±5°C. After six hours at the target temperature the kiln was turned off and allowed to cool overnight, after which the stones were removed and observed to determine the kind of change perceptible.

The Experimental Results

<u>Sample 1</u>

Surface color was dark yellow-brown and penetrated approximately 1 mm. The interior was yellow-brown with an admixture of white crypto-

crystalline material. Weathered fracture planes extended throughout the specimen. No color change occurred as the result of heating.

Sample 2

Surface color was dark yellow-brown, approximately 1 mm thick. The olive-brown interior included regular fissure planes filled with quartz. The matrix otherwise exhibited a fine grained homogeneity.

The interior materials exhibited shiny surfaces at 350°C and 400°C when flaked. Some of the shiny surfaces were more continuous over larger areas than others. Color changed to a red at 350°C. No further change could be produced by subsequent heating to higher temperatures.

Sample 3

Surface color was uniform light yellow-brown, it was less than 1 mm thick. This piece is coarse grained and its interior color was a mottled yellow-brown.

No shiny surfaces were produced during the flaking which followed each of the heating operations. Color changed to mottled weak red/very pale brown at 250°C. At 300°C the mottling became red-yellow/weak red. No color change took place at the higher temperatures.

Sample 4

Surface color was light yellow-brown broken by small dark areas. This could have been the result of irregular weathering and/or organic staining. It was approximately 2 mm thick. The specimen was coarse grained, internally homogeneous and generally pale brown.

Shiny flake scars could not be produced after any temperature increase. Color changed to reddish-yellow at 250°C. At 300°C the color changes to a weak red and at 350°C it changes to red. Subsequent heating produced no additional change.

Sample 5

Surface color was dark yellow-brown, with signs of weathering and/or organic staining. Cortex was approximately 1 mm thick. The interior was mottled pale yellow in color and possessed a few weathered fracture planes. The chert was medium-fine grained and homogeneous.

Shiny flake scars can be produced on this stone after heating to 350°C. Color became a reddish-brown/light brown at 250°C, and became a weak red at 350°C and red at 400°C.

Sample 6

Surface color was uniform dark yellow-brown and less than 1 mm thick. The fine grained yellow-brown contained quartz-filled fissures.

Shiny flake scars could not be produced after any of the heating operations. Color became light red at 250°C and red at all higher temperatures.

Sample 7

Surface color was dark yellow-brown, less than 1 mm thick and exhibits irregular weathering and/or organic staining. The fine grained yellow-brown interior was mottled with numerous thin quartz filled fissures. They extended inwards to the center of the cobble.

Shiny flakes could be produced on stone heated to 300°C. Color changed to reddish-yellow at 250°C and red at 300°C, 350°C and 400°C.

Sample 8

Surface color was dark yellow-brown, less than 1 mm thick. The fine grained light yellow-brown interior was fissured.

Shiny flake scars were produced on stone heated to 300°C. Color changed to reddish-brown at 250°C and weak red at 300°C, 350°C, and 400°C.

Sample 9

Surface color was light yellow-brown, less than 1 mm thick. The interior is medium-fine grained, homogeneous and yellow-brown.

Shiny flakes were produced on stone previously heated to 350°C. Color became reddish-brown at 250°C and dark red at all higher temperatures.

Sample 10

Surface color was dark yellow-brown containing small areas of darker material. It is less than 1 mm thick. The yellow-brown interior ranges from fine grained uniform texture to fissured areas.

Shiny flake scars occur after heating to 300°C or 400°C. Color changed to yellowish-red at 250°C and red at all subsequent temperatures.

Sample 11

Surface color was yellow-brown, less than 1 mm thick. The interior is mottled yellow-brown and medium-fine grained with quartz-filled fissures.

Shiny flake scars were produced on stone heated to 250°C and 400°C. Color changed to a strong brown at 250°C, a mottled dusky red/yellowish-red at 300°C and red at 350°C and 400°C.

Sample 12

Surface color was yellow-brown, 1 to 2 mm thick, with weathered fissures. The yellow-brown interior was fine grained and riddled with quartz-filled fissures.

Shiny flake scars were produced after heating to 300°C. Color changed to dark red at 300°C and at all higher temperatures.

Results

These data may be summarized. In nature surface color varied from a light yellow-brown to a dark yellow-brown. This averaged 1 mm in thick-

ness. Cobble size ranged from 1 to 10 cm in diameter, but averaged 5 cm. Internally the colors ranged from a pale yellow to yellow-brown. Texture was much the same from cobble to cobble as well as within individual cobbles. Quartz-filled fissures occur in otherwise uniform matrices. These are most frequent on fine grained examples. Coarse-grained cobbles exhibited few internal fissures or weathering planes.

Color change occurred in all but one of the samples (Sample 1). Change ranged from weak yellow reds to dark reds. Many samples became mottled yellow-red on the inside and yellow-red on the outside when heated to 250°C. However, at 300°C runs the yellow-red deepened in many cases. Further increases to 350°C and 400°C produced a red color. Many pieces produced shiny flake scars after being heated to 400°C.

These experiments duplicated much of the lithic material found on Middle Woodland Miller II phase sites. Many heat spalls and much heat-crazed chert occur on Miller III sites. This required explanation, since our experiments produced few. Thermal cracking and spalling was produced at 400°C, but it was negligible. Purdy (1975:136) suggests that cracking and spalling may result from temperature rises at rates more rapid than those used in these experiments. Many of the pieces from archaeological proveniences were extremely fire-cracked and crazed, with pot lid fractures and discolored surfaces. In order to duplicate this, natural cobbles from the Tombigbee River were heated to 550°C for six hours. The temperature was elevated in excess of 100°C every 15 minutes and produced spalling (Fig. 50). The thermal spalls produced by this technique resemble those from Miller III sites. The color produced at this temperature was a consistent dark red. Subsequent flaking produced a very shiny scar surface. The fine-medium grained material with the quartz-filled fissures showed the most thermal damage or spalling. They also produced a somewhat better spall than the coarser grained cherts.

These experiments were not exhaustive, but they do indicate that certain of our observations on the prehistoric materials were the result of technological processes available to the native peoples of the region.

Table 6. Change in Cortex Color During Temperature Tests on Chert Samples from the Gainesville Lake Area.

Sample	250°C.		300°C.		350°C.		400°C.	
	BF	AF	BF	AF	BF	AF	BF	AF
1. Locale 1	10YR5/4	2.5YR5/4	10YR5/4	10R4/4	10YR5/4	10R4/4	10YR5/4	10R4/4
2. Locale 1	10R4/4	5YR5/6	10YR4/4	2.5YR2.5/4	10YR4/4	10R3/4	10YR4/4	10R3/4
3. Locale 1	10YR6/4	5YR4.5/6	10YR6/4	2.5YR3/4	10YR6/4	2.5YR3/6	10YR6/4	7.5YR5/4
4. Locale 3	10YR6/4	7.5YR5.5/6	10YR6/4	5YR5/4	10YR6/4	2.5YR5/6	10YR6/4	5YR6/6
5. Locale 3	10YR3/4	2.5YR2.5/2	10YR3/4	2.5YR2.5/2	10YR3/4	10R3/4	10YR3/4	2.5YR3/6
6. Locale 3	10YR4/6	2.5YR2.5/4	10YR4/6	10R3/3	10YR4/6	10R3/2	10YR4/6	10R3/4
7. Locale 4	10YR4/6	2.5YR2.5/4	10YR4/6	2.5YR3/4	10YR4/6	10R3/4	10YR4/6	10R3/4
8. Locale 4	10YR3/4	5YR3/4	10YR3/4	2.5YR2.5/4	10YR3/4	10R3/4	10YR3/4	10R3/3
9. Locale 5	10YR6/4	2.5YR4/4	10YR6/4	-----*	10YR6/4	10R4/4	10YR6/4	10R4/4
10. Locale 5	10YR4/6	2.5YR4/4	10YR4/6	2.5YR3/6	10YR4/6	10R3/6	10YR4/6	10R3/6
11. Locale 5	10YR5/4	5YR5/6	10YR5/4	2.5YR4/6	10YR5/4	10R3/6	10YR5/4	10R4/4
12. Locale 5	10YR5/6	2.5YR3/6	10YR5/6	10R3/3	10YR5/6	10R3/3	10YR5/6	10R3/6

------* Color indeterminable

Table 7. Changes in Internal Color and Luster During Temperature Tests on Chert Samples from the Gainesville Lake Area.

Sample	250°C. BF	250°C. AF	Luster B	Luster A	300°C. BF	300°C. AF	Luster B	Luster A	350°C. BF	350°C. AF	Luster B	Luster A	400°C. BF	400°C. AF	Luster B	Luster A
1. Locale 1	10YR8/1	10YR8/1	1	1	10YR8/1	10YR8/1	1	1	10YR8/1	10YR8/1	1	1	10YR8/1	10YR8/1	1	1
2. Locale 1	2.5Y4/4 10YR5/6	______*	-	-	2.5Y4/4 10YR5/6	10R4/6	1	1	2.5Y4/4 10YR5/6	10R3/6	1	3	2.5Y4/4 10YR5/6	10R3/6	1	3
3. Locale 1	10YR5/4 2.5Y8/4	10R4/4 10YR8/4	1	1	10YR5/4 2.5Y8/4	5YR7/6 10R4/3	1	1	10YR5/4 2.5Y8/4	10R4/3	1	1	10YR5/4 2.5Y8/4	10R4/3	1	1
4. Locale 3	10YR7/4	5YR6/6	1	1	10YR7/4	10R5/4	1	1	10YR7/4	10R5/6	1	1	10YR7/4	10R5/6	1	1
5. Locale 3	2.5Y8/4	5YR5/4 7.5YR6/4	1	1	2.5Y8/4	______*	1	1	2.5Y8/4	10R4/3	1	2	2.5Y8/4	10R4/6	1	2
6. Locale 3	10YR6/6	2.5YR6/6	1	1	10YR6/6	10R5/6	1	1	10YR6/6	10R4/6	1	1	10YR6/6	10R4/6	1	1
7. Locale 4	10YR6/6	7.5YR7/6	1	1	10YR6/6	10R4/6	1	2	10YR6/6	10R5/6	1	2	10YR6/6	10R5/4 10R5/6	1	2
8. Locale 4	10YR6/4	2.5YR4/4	1	1	10YR6/4	10R5/4	1	2	10YR6/4	10R5/4	1	2	10YR6/4	10R5/4	1	2
9. Locale 5	10YR5/6	2.5YR4/4	1	1	10YR5/6	10R3/6	1	1	10YR5/6	10R3/6	1	2	10YR5/6	10R3/6	1	[illegible]
10. Locale 5	10YR5/8	5YR5/6	1	1	10YR5/8	10R4/6	1	2	10YR5/8	10R4/6	1	2	10YR5/8	10R4/6	1	3
11. Locale 5	10YR5/6	7.5YR5/6	1	2	10YR5/6	10R3/4 5YR5/8	1	2	10YR5/6	10R4/6	1	2	10YR5/6	10R3/6	1	3
12. Locale 5	10YR5/8	______*	1	1	10YR5/8	10R3/6	1	2	10YR5/8	10R3/6	1	2	10YR5/8	10R3/6	1	2

______* Color indeterminable

Figure 50. Experimentally Produced Thermal Spalls.

APPENDIX 3

THE PHYSICAL EVIDENCE

A. 1Gr1X1

Thirty-six thousand pieces of stone were recovered from 1Gr1X1. Assemblages associated with the Late Miller II Turkey Paw subphase and Middle Miller III Cofferdam subphase were identified. Preceramic, Gulf Formational and Middle Woodland materials were present. The following projectile point clusters were represented in the lithic material recovered from this site: Flint Creek Cluster; Wade Cluster; Little Bear Creek Cluster; Late Archaic; Morrow Mountain-White Springs Cluster; Kirk Cluster; Hardaway Cluster; Big Sandy Cluster; Dalton Cluster; Lanceolate Paleo Cluster.

These data suggest a multi-occupation situation. At least seven preceramic components are represented. The strongest Archaic occupation represented was associated with the Late Archaic (West Greene) and Little Bear Creek cluster forms.

Late Miller II House Cluster I

Thirteen features near Structure I were arbitrarily selected for analysis. The criterion for selection was proximity to Structure 1. These pits showed little disturbance and were considered associated with the Late Miller II, Turkey Paw subphase. Mixture with Archaic materials was detected; however, it was not considered sufficient to affect our interpretation of a Turkey Paw subphase lithic assemblage. Features 23, 27, 28b, 30, 34, 35, 39, 42, 43, 45, 46, and 48 were thus included in the Late Miller II lithic assemblage.

Fire Cracked Chert. There was evidence for intense heating of local chert material. A collection (247 pieces)weighing 562 g (mean wt. 2.27 g) was recovered. These pieces are fire-cracked/crazed chert and resemble experimentally produced heat spalls. Feature 42, inside the structure, contained the heaviest weight of fire-cracked chert.

Debitage. The collection (1,953 flakes) may be divided into the following categories: secondary decortication flakes 33.8 percent; bifacial thinning flakes 29.5 percent; other flakes 23.5 percent; primary decortication 9.5 percent; amorphous and blade-like flakes 3.7 percent.

The 839 decortication flakes were made of five different siliceous stone types. Of that total 52.2 percent were DRC; 19.4 percent were Misc.; 17.6 percent were YC; 9.6 percent RC; and 1.4 percent TQ. Since the miscellaneous chert is thought to have been heated, it is probable that over 80 percent of the debitage from the Late Miller II occupation was heat treated in some way.

Manufacture and Use Modified Flaked Stone. Forty-nine modified flaked stone tools (excluding projectile points) were identified. Of these 10.2 percent were knives; 8.1 percent were knife/scrapers; 2.0 percent were drills; 2.0 percent were preforms; 6.0 percent were perforators; 2.1 percent were gouge-chisel-wedges; 16.3 percent were unidentifiable bifaces; 26.5 percent were utilized flakes; 18.4 percent were utilized thermal spalls; and 6.1 percent were cores. Raw materials were the same as those which form the debitage as would be expected if the tools were made and used at home.

This assemblage is predominantly bifacial. Utilized flakes and thermal spalls account for 44.9 percent of the modified flaked stone. Biface knives, knife/scrapers and unidentifiable bifaces made up the bulk of these intentionally flaked tools.

Technologically, 50 percent of the tools were on flakes, 22.2 percent were on cobbles and 27.7 percent thermal spalls.

Projectile Points. Twenty-eight projectile points and fragments were recovered. Nine belong to the Middle Woodland tapered shoulder cluster; 6 are of var. Turkey Paw; 3 are of var. Tombigbee. The other points are Middle and Late Archaic forms, representing at least four different projectile point clusters including: Little Bear Creek, Flint Creek and Morrow Mountain-White Springs. We assume that they are intrusive and not to be considered part of the Miller II assemblage.

Three arrow points recovered from the Late Miller II House Cluster are felt to be intrusive, and not part of the Late Miller II subphase.

Ground stone. A sandstone muller, metate, and sandstone abraders were recovered: the abraders inside the structure in Feature 42; the metate from Feature 30; and the muller in the lower portion of Feature 48.

Middle Miller III, Feature Cluster I

No well defined feature or house cluster was attributed to the Middle Miller III Cofferdam subphase, and Cofferdam subphase features were contaminated with Archaic and Late Miller II artifacts. Nevertheless, Features 5, 10, 11, 12, 16, 17, 19, 21, 24a, 24b, 25, 26a, 26b, 29, 38, 40 and 44 were regarded as Cofferdam subphase assemblages.

Fire-Cracked Chert. Some 1,904 pieces of fire-cracked chert with a combined total weight of 3,791.2 g (mean wt. 1.99 g) were recovered. This stone resembles that produced during thermal alteration experiments.

Debitage. The collection (9,289 flakes) may be divided into 47.1 percent secondary decortication flakes, 23.2 percent were bifacial thinning, 13.5 percent other, 14 percent primary decortication and the remainder (2.2 percent) amorphous or blade-like flakes.

Of raw material represented by the secondary decortication flakes 68.9 percent were DRC; 15.1 percent Misc.; 9.3 percent YC and 6.5 percent RC. About 85 percent was thermally altered.

Manufacture and Use Modified Flaked Stone. Two hundred ninty-nine modified flaked stone tools (excluding projectile points) were identified. Of these, 5.6 percent were biface knives; 8.6 percent were scrapers; 1.3 percent were drills; 5.6 percent were perforators; 3 percent were blanks; 3 percent were preforms; 1 percent were reamers, 1.3 percent were gouge-chiselwedges; 0.9 percent were choppers; and 16.9 percent were unidentifiable uniface and bifacial tools. Utilized flakes comprised 30.7 percent, utilized thermal spalls 15 percent and cores 5 percent of the total.

Most of the intentionally flaked tools were bifacial. The raw material distribution is the same as that recorded for the secondary decortication flake.

Technologically, 120 (55.6 percent) were on flakes, 51 (23.6 percent) were on thermal spalls, and 45 (20.8 percent) on cobbles.

Projectile Points. Thirty-one projectile points were recovered. Clusters represented include Lanceolate Spike, Expanded Haft, Tapered Shoulder, Little Bear Creek, Morrow Mountain-White Springs, and Big Sandy.

Eighty-eight triangular arrow points were recovered: 26 (29.5 percent) were fragments. Hamilton var. Gainesville and Madison var. Gainesville made up 43.1 percent of the point inventory.

Modified Groundstone. Fifteen ground stone implements were recovered. These were hammerstones, an anvil stone, a muller, pitted stones, abraders and various pieces of unidentifiable groundstone.

Stone Artifacts From Other Proveniences

The remaining artifacts from excavation units may be discussed.

Excavation Units

Debitage. Six test units produced 10,832 flakes. The upper two levels of these units were assigned to Late Miller II and Middle Miller III. Level 3 contained both Miller and Archaic lithic remains and Levels 4 to 7 were preceramic Archaic levels. Some disturbance, however, was evident throughout.

Miller and Archaic horizons in the excavation can be distinguished by the debitage and raw material frequencies (Fig. 51). The local red and dark red cherts predominate in the upper two levels; Level 3 is a mixed zone with both Miller and Archaic technology represented; Levels 4 to 6 represent the Archaic.

The proportion of the different flake types from Levels 1, 2, 4, 5 and 6 were calculated for the five major siliceous stone categories: Dark Red Chert, Red Chert, Yellow Chert, Tallahatte Quartzite and Miscellaneous Chert. The different flake types from the upper and lower levels occur in roughly the same proportion, although there were somewhat more tertiary flakes in the lower levels. Dark Red Chert occurs as a higher proportion

of each flake type in the upper level. Red chert was used to produce 5 percent for each flake type, yellow chert 5 to 10 percent of each flake type, and Tallahatta Quartzite less than 5 percent of most flake categories, although it was used in 30.1 percent of the flakes in the other category. Miscellaneous chert was used in varying proportions between 17 and 35 percent of the flake types.

In the lower levels, some intrusive dark red chert flakes occur. Nevertheless, dark red chert was used to produce between 5 and 30 percent of the different flake types; red chert between 5 and 10 percent; yellow chert from 15 to 60 percent and Tallahatta quartzite from 14 to 35 percent. Miscellaneous chert was used in varying proportions between 11 and 23 percent of the different flake types.

Modified Flaked Stone. Four hundred fourteen modified flaked stone tools (excluding projectile points) were recovered. The heaviest concentration of material was located in the stratigraphic trench along the terrace edge. All major tool classes were recovered.

The upper two levels contain Miller II and Miller III accumulations, and exhibit a high proportion of thermally altered chert. These assemblages resemble the Miller II and Miller III subphase assemblages from other proveniences. The lower levels contain a lesser incidence of heated material. The lithic technology in these levels used bipolar flaked cobble cores. Some uniface hafted end scrapers and side scrapers were recovered to round out the tool assemblage.

Projectile Points. Fifty-three projectile points, whole or fragmented, were recovered. Many of the Late Woodland-Mississippian triangular forms came from the upper two levels.

All projectile point clusters were present (except the Bifurcate and Eva clusters). This is the only site with a Dalton (Cochrane) component. Gulf Formational, Late Archaic and Middle Archaic forms were scattered throughout Levels 1-4.

Modified Groundstone Artifacts. Fifteen ground stone tools were recovered. Ten came from Level 3 or lower, five in Level 4 alone. Hammerstones, a muller, abraders, a celt fragment, sandstone and steatite bowl fragments, a gorget fragment, sandstone saw and a combination anvilstone/muller were recovered (Table 16).

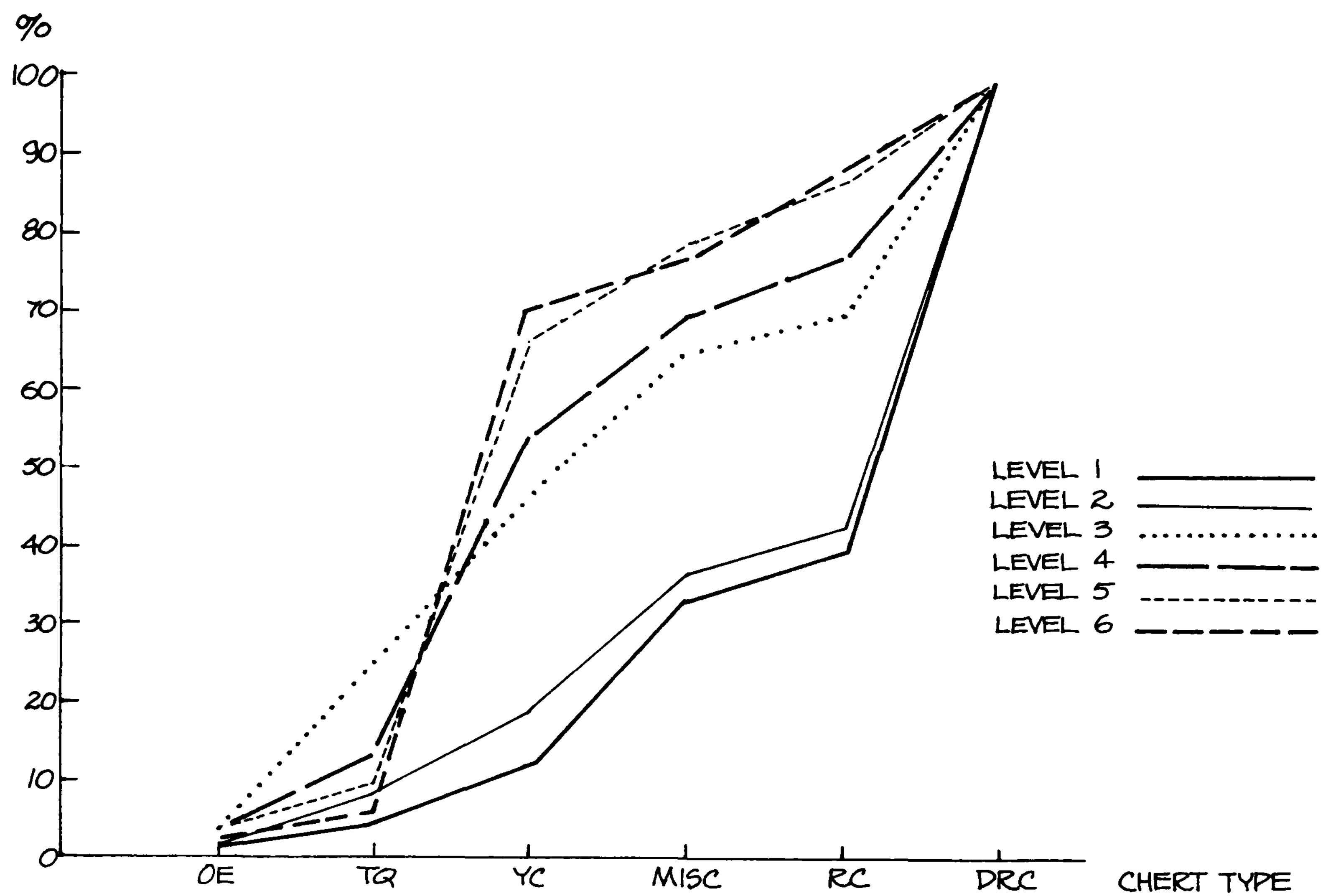

Figure 51. Site 1Gr1x1, Cumulative Percentage Graph by Level and Chert Type.

Table 8. Site 1Gr1X1. Distribution of Arrow Points.

Provenience	Class 1	2	3	4	5	6	7	8	9	12	13	16	19	20	168	169	170	171	Total
Excavation Units																			
440RN500																			
Level 1	1			2		1			1	1	1		1		1			1	10
Level 2				1			1												2
Subtotal	1	0	0	3	0	1	1	0	1	1	1	0	1	0	1	0	0	1	12
450NR500																			
Level 1	4	1		2					1					1				2	11
Level 2	3			5			1						1		1			1	12
Subtotal	7	1	0	7	0	0	1	0	1	0	0	0	1	1	1	0	0	3	23
460NR500																			
Level 1	1	1		2		1		1			1				1				8
Level 2	2																		2
Level 3		1			1				1					1	1				5
Level 6				1															1
Subtotal	3	2	0	3	1	1	0	1	1	0	1	0	0	1	2	0	0	0	16
480NR500																			
Level 1	4			4											2			1	11
Level 2				4							1		1		1				7
Level 3																		1	1
Subtotal	4	0	0	8	0	0	0	0	0	0	1	0	1	0	3	0	0	2	19
400NR700																			
Level 2				1															1
Subtotal	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
500NR600																			
Level 1	3	1		2															6
Level 2	1			1						1					1				4
Level 4				1											1				2
Subtotal	4	1	0	4	0	0	0	0	0	1	0	0	0	0	2	0	0	0	12
Features																			
Feature 2				2															2
Feature 5	2							1							1			1	5
Feature 10	4	1		3				1									1	3	13
Feature 11, Burial 1	8			6		1		1	2	1					3			1	23
Feature 12	1	1		4		1					1	1			1			3	13
Feature 14																	1		1
Feature 17											1				1	1		2	5
Feature 18-B									1										1
Feature 21	1		1								1								3
Feature 24a																		1	1
Feature 24-b				1							1				1				3
Feature 24-c	2			1							1								4
Feature 25											1								1
Feature 26-a		1	1																2
Feature 30				1															1
Feature 35																	1		1
Feature 38	2	1		2		1						1							7
Feature 39	1																		1
Feature 41															1				1
Feature 44	2			4				1						1	1			4	13
Subtotal	23	4	2	24	0	3	0	4	3	1	6	2	0	1	9	1	3	15	101
Surface				1															1
Total	42	8	2	51	1	5	2	5	6	3	9	2	3	3	18	1	3	21	185

Table 9. Site 1Gr1X1. Distribution of Projectile Points.

	Class																																																								
Provenance	22	23	33	36	37	43	52	55	56	57	58	59	69	70	73	76	77	82	83	84	89	90	95	96	97	98	100	102	103	105	107	108	110	117	118	120	122	123	124	140	143	144	145	146	149	152	153	154	156	157	159	160	163	164	165	166	167	Total
Excavation Units																																																									
440NR500																																																									
Level 1																																																							1		1
Level 2																																																					1			1	2
Level 4																																																						2		1	3
Subtotal																																																					1	2	1	2	6
450NR500																																																									
Level 1					1																																																1		2	1	5
Level 2							1																										1		1																					1	4
Level 3																	1										1																										1			3
Level 5																																																							1	1	2
Level 6																																																								1	1
Subtotal					1		1										1										1						1		1																		1	1	3	4	15
460NR500																																																									
Level 1																														1																										1
Level 3													1							1																																			2	4
Level 4																																													1		1										2
Level 5																																																					1				1
Subtotal													1							1										1															1		1						1			2	8
480NR500																																																									
Level 1												1		1																																								1	4	7
Level 2			1														1																																								1	3
Level 3																										1											1																				2
Level 4																																						1												1						2
Level 5																																																			1			1			2
Subtotal			1										1		1		1										1											1	1												1	1			1	1	5	16
400NR700																																																									
Level 1							1																																																	1	2
Level 2		1				1													1																																1								4
Level 4																																																								2	2
Subtotal		1				1		1											1																														1							3	8
550NR600																																																									
Level 2																																	1		1																						2
Level 3																																																								1	1
Level 4																												1																				1									2
Level 5																																																				1					1
Level 6																																										1															1
Level 7																																																								1	1
Subtotal																												1					1		1							1						1				1				2	8
840N550W																																																									
Level 4																																									1																1
Subtotal																																									1																1
840N565W																																																									
Level 6																																												1													1
Subtotal																																												1													1
Features																																																									
Feature 1																															1																						1			2
Feature 2																																																								1	1
Feature 5																																																						1			1
Feature 6																																																		1							1
Feature 9						1													1						1																																3
Feature 10		1	1																									1	1																									1		1	6
Feature 11 (Bur. I)				1						1																							1																		1			2	6
Feature 12										1																																														1	2
Feature 13																								1																																	1
Feature 15																																																					1			1	2
Feature 16									1																																											1				2
Feature 17							1														1								1			1	1																		1			6
Feature 18-a																																							1														1			2
Feature 18-b																																																						1			1
Feature 21																																																								2	2
Feature 23																															1			1						1													1			4
Feature 24-b		1																																																						1
Feature 25															1																														1										2
Feature 26-b																																																						1		1	2
Feature 28-b																																																								2	2
Feature 30																								1																																	1
Feature 35								1			1										1														1																			2	6
Feature 36																																																						1			1
Feature 37																																1																								1
Feature 39																																																						1			1
Feature 42								1			1																																										1		2	5
Feature 43							1				1																																													2
Feature 44							1																																																	1
Feature 47																																																					1			1	2
Feature 48 Lower		1					2				1																																												1	5
Subtotal	0	0	3	1	1	0	1	5	2	1	2	4	0	0	0	1	0	0	0	1	0	1	1	0	2	1	0	0	1	1	0	3	1	0	3	1	1	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	4	11	0	17	74
Surface						1		1	1													1	1					1								1															2				9
Class Total	0	1	4	1	1	2	2	7	3	2	2	4	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	3	1	1	3	1	2	3	3	1	2	1	1	1	1	1	0	1	1	1	1	1	1	2	1	1	9	15	5	35	146

Table 10. Site 1Gr1X1. Introduced Rock in Excavation Units.

PROVENIENCE		CATEGORY																												
Level	Unit	Firecracked/ Crazed Chert		Cracked & Irreg. Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Unmodified Conglomerate		Unmodified Breccia		Hematite		Limonite		Cobble-Pebble	Petrified Wood	Steatite		Manganese Nodule		Greenstone		Siltstone		Shale		TOTALS	
		CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT
	440NR500																													
1		125	408	32	124	398			1	12							1,804.6	4	1	0.5									287	2,623.1
2		97	309	28	143	479	1	0.5									1,318.4	5	1	1.7									275	2,108.6
3		49	116	14	83	268											528.2	1											147	912.2
4		2	10	6	30	221											285.8	1											39	516.8
5		8	10	6	3	1											212.6												17	223.6
6				5	1	1											145.3												6	146.3
	Subtotal	281	853	91	384	1,368	1	0.5	1	12	-	-	-	-		-	4,294.9	11	2	2.2	-	-							771	6,530.6
	400NR700																													
1		24	56	10	24	74											243.3		1	0.9									59	374.2
2		46		16	73	435											942.1	2	1	2.0									138	1,379.1
3		17	60	23	49	423											764.6	1	1	0.8									91	1,248.4
4		6	29	12	72	88	38	5									573.5				104	0.1							232	695.6
5		4	7	12	7	127											264.9												23	398.9
6				14	11	3											736.3												25	739.3
	Subtotal	97	152	87	236	1,150	38	5	-	-	-	-	-	-	-	-	3,524.7	3	3	3.7	104	0.1							568	4,835.5
	450NR500																													
1		110	252	65	130	433	2	2.0							3	3	1,489.9												310	2,179.9
2		149	335	82	147		1	0.8									2,366.3	2					1	3					382	2,705.1
3		102	125	47	138	493			1	62							1,185.2												288	1,865.2
4		16	20	29	77	115							17	5			428.0												139	568.0
5		7	9	16	22	21											311.0												45	341.0
6		2	5	14	1	0.2											322.2												17	327.4
7				2	4	0.9											175.1												6	176.0
8				8					1	2							269.0												9	271.0
	Subtotal	386	746	263	519	1,063.1	3	2.8	2	64	-	-	17	5	3	3	6,546.7	2	-	-	-	-	1	3					1,196	8,433.6
	460NR500																													
1		75	383	28	110	405									5	10	1,858.4	2	1	22.0			2	0.4	1	0.6			221	2,678.4
2		107	287	152	58	63	1	3									3,106.1	3					1	2					324	3,460.1
3		106	230	50	110	566											1,891.3		2	5.0									269	2,694.3
4		56	137	22	51	173					1	1					1,088.0												130	1,399.0
5		7	2.6	8	42	206											479.0												57	687.6
6		1	0.4		13	41											253.4												20	294.8
	Subtotal	352	1,040	260	390	1,454	1	3	-	-	1	1	-	-	5	10	8,676.2	5	3	27.0	-	-	3	2.4	1	0.6			1,021	11,214.2
	500NR600																													
1		89	199	17	54	70											717.7										2	0.5	162	987.2
2		130	254	19	97	183	8	12									826.3										6	2.0	260	1,277.3
3		2	2	3	20	128							2	0.2			221.9		1	37.0									28	389.1
4		13	19	9	35	359							1	0.4			441.8												58	820.2
5		10	29	5	28	246	2	0.6									233.0												45	508.6
6		11	78	7	21	386							3	1			245.1				1	1							43	711.1
7				17	12	7											289.0				4	1							33	297.0
8				3													311.1												3	311.1
	Subtotal	255	581	80	267	1,379	10	12.5	-	-	-	-	6	1.6	-	-	3,285.9	-	1	37.0	5	2					8	2.5	632	5,301.6
	480NR500																													
1		172	693	52	93	440	13	26									1,881.9	2	2	3.0			1	0.4					335	3,044.3
2		158	542		124	382	4	9			3	2					2,070.8												289	3,005.8
3		295	579	29	40	208	1	2									1,065.6												365	1,854.6
4		315	584	24	41	193											750	2											382	1,527.0
5		148	273	26	49	241											615.7												223	1,129.7
6		13	9	11	13	6											168												37	183
7																	40.4												0	40.4
	Subtotal	1,101	2,680	142	360	1,470	18	37	-	-	3	2	-	-	-	-	6,592.4	4	2	3.0	-	-	1	0.4					1,631	10,784.8
	TOTAL	2,472	6,052	923	2,156	7,884	71	60.9	3	76	4	3	23	6.6	8	13	32,920.8	25	11	72.9	109	2.1	5	5.8	1	0.6	8	2.5	5,819	47,100.3

Table 11. Site 1Gr1X1. Debitage in Excavation Units.

PROVENIENCE / CATEGORY

Primary Decortication Flakes; Secondary Decortication Flakes

Level	Unit	Primary DC	Primary RC	Primary YC	Primary TQ	Primary NC	Primary AG	Primary OE	Primary FC-BC	Primary OQ-NQ	Secondary DC	Secondary RC	Secondary YC	Secondary TQ	Secondary NC	Secondary AG	Secondary OE	Secondary FC-BC	Secondary OQ-NQ
	450N R500																		
1		95	7	8		27					248	7	19		66				
2		118	8	11		25				1	427	11	46		69				2
3		20		14		8				3	33		34		19				3
4		16		29		8					26	6	57		13				
5		6	2	9		3					15	7	41		8				1
6			1	4		1					3	1	2		1				
7				1									1						
8																			
	Subtotal	255	18	76	-	72	-	-	-	4	750	32	200	-	176	-	-	-	6
	440N R500																		
1		100	9	10		21					307	13	26		45				1
2		79	2	18		17				1	178	7	31		57				
3		34	1	13		17				1	65	4	47		29				1
4		6	8	10		3				1	7	7	20	1	8				8
5		4	1	3		1					4	6	21		4				6
6											1		3						
	Subtotal	223	21	54	-	59	-	-	-	3	562	37	148	1	143	-	-	-	15
	460N R500																		
1		47	7	5		13					164	17	29		56				1
2		58	13	13		23					201	18	35		56				4
3		11	8	3							22	8	14		8				2
4		12	5	6						1	20	12	34		8				3
5		3	1	14						2	6	9	40		4				1
6		2	1	5							1		9		1				
	Subtotal	133	35	46	-	36	-	-	-	3	414	64	161	-	133	-	-	-	11
	480N R500																		
1		74	12	12		44					278	59	42		148		1	2	2
2		99	9	13		76					240	51	68		93				
3		10	2	3		7				1	11	4	9		7				
4		7		11		6					2	5	26		7		1		
5		3	3	14		7				4	5		51		8				3
6			1	4							4	1	17						1
	Subtotal	193	27	57	-	90	-	-	-	5	540	120	213	-	263	-	2	2	6
	500N R600																		
1		37		2		2					119	4	16		30				1
2		38	1	7		14					74	3	5		26				
3												2	5						
4		13		8		2									1				
5		1	2								5	3	11		8				
6		5	1	4							6		12		2				2
7			1	2						1	3	2	3		1				
8											2		1						
	Subtotal	94	5	23	-	18	-	-	-	1	209	14	53	-	68	-	-	-	3
	400N R700																		
1		35	4	2		9					49	4	6		26				
2		21	5	6		19					100	9	12		28				
3		7	2	2		4					16	6	12		9				
4		5		4		1					4	2	19		2				
5		1	1	1							2	2	8						
6				3							2		6		1				
	Subtotal	69	12	18	-	33	-	-	-	-	173	23	63	-	66	-	-	-	-
	Total	967	118	274	-	308	-	-	-	16	2,648	290	838	1	849	-	2	2	42

Bifacial Thinning Flakes; Other Flakes

Level	Unit	Bifacial DC	Bifacial RC	Bifacial YC	Bifacial TQ	Bifacial NC	Bifacial AG	Bifacial OE	Bifacial FC-BC	Bifacial OQ-NQ	Other DC	Other RC	Other YC	Other TQ	Other NC	Other AG	Other OE	Other FC-BC	Other OQ-NQ
	450N R500																		
1		[illegible]	[illegible]		6	[illegible]			1		34	2	2	7	14			1	
2		[illegible]			17	19		2	3		65	8	8	54	18		2		
3		[illegible]		[illegible]	25	10					7		14	52	12		2	1	
4		11	[illegible]		4	9			1		9	4	18	20	15				2
5		7		[illegible]	2	6				1	11	2	17	12	10				1
6				1							1		1	2	1				
7											1				1				
8				1															
	Subtotal	206	[illegible]	58	54	[illegible]	-	4	5	1	128	16	60	147	71	-	4	2	3
	440N R500																		
1		60		17	6	18		4	1		33	4	4	17	5		4	1	
2		45	3	13	8	14			1		28	4	9	20	12				1
3		26	3	11	12	4		6	2		17		12	31	18		1		
4		3			1	4		1			4		5	8			2	1	1
5		2	1	1	[illegible]	1							1	9	2				1
6																			
	Subtotal	136	[illegible]	51	36	55	-	11	4	-	82	8	31	85	37	-	7	2	3
	460N R500																		
1		83	9	18	5	27					36	5	3	14	18			2	
2		101	25	24	9	41		3	5		82	5	6	26	25				2
3		4	2	10	10	5			1		7	1	4	18	4			1	
4		5	2	9	5	5		1		1	7		13	13			1		
5			7	13	3	1			1		4	2	16	10	1				
6				4		1					2	1	1	2			1		
	Subtotal	193	45	79	32	80	-	4	7	1	138	14	43	83	48	-	2	3	2
	480N R500																		
1		113	22	33	5	44		2	2	1	55	9	9	27	36			1	2
2		83	15	23	21	37		2	3		36	6	7	57	23		3	1	1
3		7	6	6	10	6		1		1	8	3	3	29	8				
4			1	11	2	7						1	2	9					1
5		8	2	39	6	10					4	3	19	6	2				1
6		2	2	20								1	13	1	4				
	Subtotal	213	48	132	44	104	-	5	5	2	103	23	53	129	73	-	3	2	5
	500N R600																		
1		34	4	6	3	12		1			13	1	1	11	5		2		1
2		47	6	11	6	24		1			24	3	5	48	12				
3			1	1	1	1		1						4	2				
4		6		7	8	7		3			1	2	4	15	5				
5		1	3	11	5	1					2	2	6	14	1				
6		2	1	[illegible]	5	1					1		6	4	2		1		
7		2	1		1	1					1		6	2	1				
8			1											2			1		
	Subtotal	92	17	40	29	48	-	6	-	-	42	8	28	100	28	-	4	-	1
	400N R700																		
1		14		2		11		2			13	5	3	3	6				
2		36	3	16		11					18	3	5	33	7		1		1
3		10	7	-	5	2			1		6	3	4	27	1				
4			1	5				2			5		9	6			3		
5		4	1		1			3				2	7	1	1		1		
6		1		-									5		1				
	Subtotal	65	12	29	11	24	-	7	3	-	42	13	33	70	16	-	5	-	1
	Total	905	144	[illegible]	[illegible]	[illegible]	-	37	24	4	535	82	248	614	273	-	25	9	15

Amorphous Flakes; Blade-like Flakes

Level	Unit	Amorphous DC	Amorphous RC	Amorphous YC	Amorphous TQ	Amorphous NC	Amorphous AG	Amorphous OE	Amorphous FC-BC	Amorphous OQ-NQ	Blade-like DC	Blade-like RC	Blade-like YC	Blade-like TQ	Blade-like NC	Blade-like AG	Blade-like OE	Blade-like FC-BC	Blade-like OQ-NQ	TOTALS
	450N R500																			
1		7			2	2					2				2					1,033
2		16		2	1	6					1		2		3					1,081
3					2							2			1					278
4		1			2						1		1		1					254
5						2							1							173
6																				19
7																				4
8																				1
	Subtotal	24	-	2	7	10	-	-	-	-	4	2	4	-	7	-	-	-	-	2,843
	440N R500																			
1		7		1	2	3									1					720
2		5		1	3	1					1	1	1	1						567
3			2		3					1	2	2	1							374
4													2							124
5																				74
6																				4
	Subtotal	12	2	2	8	4	-	-	-	1	3	3	4	1	1	-	-	-	-	1,863
	460N R500																			
1		5	1		3	4					3				1					576
2		15		2	5	4				1	2		1							805
3			3		8	1					1	1								157
4		1								1			1							166
5																				138
6																				31
	Subtotal	21	4	2	16	9	-	-	-	2	6	1	2	-	1	-	-	-	-	1,873
	480N R500																			
1		2		1	3	5					1	1	1		4					1,053
2					3	1					4	1	2		2					930
3						3				1			1							147
4													3		1					103
5				2								2	6							208
6																				71
	Subtotal	2	-	3	6	9	-	-	-	1	5	4	13	-	7	-	-	-	-	2,512
	500N R600																			
1															1					306
2		1			1	3							1							361
3						1														19
4		1			1	1														85
5																				76
6																				59
7																				29
8																				7
	Subtotal	2	-	-	2	5	-	-	-	-	-	-	1	-	1	-	-	-	-	942
	400N R700																			
1		1				1														196
2						1					1		1							338
3																				128
4			1		1								1							74
5								2		2										40
6																				23
	Subtotal	1	1	-	1	2	-	2	-	2	1	-	2	-	-	-	-	-	-	799
	Total	62	7	9	40	39	-	2	-	6	19	10	26	1	17	-	-	-	-	10,832

Table 12. Site 1Gr1X1. Introduced Rock in Features.

PROVENIENCE	CATEGORY																											
	Fire Cracked/ Crazed Chert		Cracked and Irregularly Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Unmodified Conglomerate		Hematite		Limonite		Cobble-Pebble	Petrified Wood	Steatite		Greenstone		Siltstone		Limestone	Quartz Crystal	Fossilized Shark Teeth	Fossilized Bone		TOTALS	TOTALS
Feature	CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	CT	WT	CT	WT	CT	WT	CT	CT	CT	CT	WT	CT	WT
Feature 1				1	18									11													1	29
Feature 2	15	39	8	35	102	3	0.1							172		1	45										62	358.1
Feature 3	1	1	1											23													2	24
Feature 4	2	1	4	3	24									46													9	71
Feature 5	60	152	8	29	327					2	1			648	1	5	12										105	1,140
Feature 6	4	2		5	100									16													9	118
Feature 8	3	1	3											8													6	9
Feature 9	23	70	7	27	35	59	25			3	1			388						1							120	519
Feature 10	367	444	62	89	801	107	369	1		9	389			2,188	1							1					637	4,191
Feature 11	359	768	58	79	598	69	272			1				1,020													566	2,658
Feature 12	164	379	14	2[illegible]	217	3	19							562													201	1,177
Feature 13	10	34	3	3	24							1	0.4	61													17	119.4
Feature 15	37	54	9	35	61	146	516					2	1	534													229	1,166
Feature 16	29	61	5	29	126	17	90	1	7	2	3	1		397													84	684
Feature 17	186	296	16	46	518	19	44	1	9	1	4			533													269	1,404
Feature 18A	55	128	7	21	41	29	53							270		2	1	1	0.4								115	493.4
Feature 18B	18	27		4	9	1	1			3	2			121													26	160
Feature 19	2	0.2	3	8	6	5	2			5	10			51													23	69.2
Feature 20	2	1		2	9	1	1							56				1	1								6	68
Feature 21	15	35	1	25	76	10	13			2	5			121													53	250
Feature 22	29	67	1	31	69									166													61	302
Feature 23	29	80	7	21	15	6	1			3	3			328													66	427
Feature 24A	42	105	3	8	53	1	0.3							127													54	285.3
Feature 24B	203	383	9	46	242					4	5	2	2	375						3	1						267	1,008
Feature 24C	114	171	10	62	272	82	94			2	1			262				1	1				32				303	801
Feature 24D	5	25		18	8	32	27							82		3	5			4	3						62	150
Feature 25	32	65	2	2	42	2	0.2							184													38	291.2
Feature 26A	41	137	13	5	25	15	37							127													74	326
Feature 26B	28	51	4	3	73									139													35	263
Feature 27	5	5	1	2	7									172										1			9	184
.eature 28A	21	56		5	10	5	7							94													31	167
Feature 28B	8	20	3	3	20	2	3							54													16	97
Feature 29	19	67	6	32	107	48	76			2	3	2	1	139													109	393
Feature 30	27	35	40	63	381	39	8	1	24	5	4	2	1	1,420	2												179	1,873
Feature 31	5	5		3	18	6	1							60		1	12	1	0.2								16	96.2
Feature 32	23	52	5	5	28	3	2							82													36	164
Feature 33	24	21	3	7	22	4	1							71													38	115
Feature 34	13	33	6	13	74	4	1					1	4	237						5	72						42	421
Feature 35	20	35	7	17	86	9	139			3	4	9	130	462													65	856
Feature 36	9	7		2	1	45	586							0.3													56	594.3
Feature 37	4	3	1	3	6									71													8	80
Feature 38	116	407	4	50	173	17	17			1	1			599	1	1	12			1	1						191	1,210
Feature 39	28	43	14	23	167	13	10			8	3	5	149	438											1	5	92	815
Feature 40	16	30	4	9	104	1	0.1			2	0.3			61													32	195.4
Feature 41	26	40	5	18	29	4	7							70													53	146
Feature 42	29	133	12	15	54	28	184			2	1			757	1												87	1,129
Feature 43	38	70	5	12	64	1	1			1	1	1	1	106				1	1								59	244
Feature 44	199	371	35	60	365	9	1			7	6			607						1	0.4						311	1,350.4
Feature 45	4	7		3	9					1				60													8	76
Feature 46	11	27	4	27	50	8	1							235													50	313
Feature 47	1	5	1	4	5									75													6	85
Feature 48 lower	7	6	4	2	24	3	3			1	0.1			195													17	228.1
Feature 48 upper	7	12	4	2	43									68													13	123
Structure I	5		4	2		4				2				5													17	5
TOTAL	2,540	5,067.2	426	1,039	5,738	860	2,612.7	4	40	72	447.4	26	289.4	15,154.3	6	13	87	5	3.6	15	77.4	1	32	1	1	5	5,041	29,522

Table 13. Site 1Gr1X1. Debitage in Features.

PROVENIENCE — CATEGORY

Feature	Primary Decortication Flakes							Secondary Decortication Flakes							Bifacial Thinning Flakes								Other Flakes								Amorphous Flakes								Blade-like Flakes							TOTALS
	DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	
1									1							1							1																							3
2	5		2		4				10	9		4			9	3	6	1	4	2	3		5	2	4	1	1	1	1	2		1		2	1											83
3					2			6	3	1		3			4		1	1	2				4			2	1													1						31
4								1		2		5								1					1		1									1										12
5	19	1	8		4		1	99	7	13		11			22	5	5	15	5	3	3		7	1	2	28	2				4			1					1			1	2			270
6			1							7		1			1			1		1					1	1		1													1					16
8	5		2		1			9				2			6										2																					27
9	9	2	6		4			26	7	18		15			15	4	12	25	1	2			7	1	8	44	3	1	1		3			2					2		2					220
10	147	12	34		18			638	45	105		102	3	6	233	34	61	40	56	8	4		73	19	27	95	20	6	2	1	11		1	4	2			1	19		1		1	1		1,830
11	163	21	18		33		1	537	88	92		129	3	1	237	31	51	40	37	11	2		106	16		92	20	3	2	1	15	1	2	6	2				10	1	1		1		1	1,775
12	85	11	8		8			335	15	33		43		2	164	8	21	31	13	7		1	4	7	6	60	10	5			7	2			1			1	2				2			892
13	7	1	2		4			57	6	11		14			21	4	6	15		5			13	2	6	21								3					3		1		2			204
15	12	3	6		3			44	9	16		16			16		3	16	1	1	1		13	6	11	35	4				2			7				1			1					227
16	36	2	4		3			64	5	16		6	1	1	27	3	6	9	3	2			7		1	21	5	4											1							227
17	71	6	5		7			249	19	20		23			68	17	20	27	8	4			34	15	3	46	14				3	1	1	2					1	2		1	1			668
18A	5	9	1		6		1	23	27	13		9		1	10	7	12	16	4	5			8	2	6	20	6	2	1	1	1			1					1						1	199
18B	12	4	1		6			36	11	7		8			14	1	4	1	3				3	4		5	3					1		1												125
19	2	4						16	8	1					13	1	1		1				10	3		4	2					1														67
20	2	1						9	2	4					3	1		3	1				1	1	4	7					1															40
21	8	3	2	1	3			27	9	7		2	2		10	5	5	3	3		1		6	3	5	17	1		1					1												125
22	9	5	4		8		1	34	8	7		14			38	6		13	2	1	1		15	4	10	23	4	2			1	1		3												214
23	7	3	6		5			32	6	15		16			25	5	21	5	10	3			11	6	11	12	5	3			2								1		2		2			214
24A	27	2	1		4			59	3	6		5		1	33	3	2	1	4				9	2		2					2															166
24B	66	2	9		9		2	23	16	16		54	2	1	101	5	18	15	25	2	3	1	62	10	4	25	11	1	2	3	2	1		2	2		1	1	5	1	1		2			506
24C	33	1	3		15		1	124	10	16		31			57	3	4	12	12	2	1		24	2	3	17	5	2	1										1							380
24D	1	1			2			20	3	4		4			3	3	2	2	2	1			5	2		3																				58
25	11	1	1		3	1		23	7	3		11				5	2		5							1	2				1															77
26A	22		9		13			56	4	6		11			30	11	3	1	5				5			3	2																			181
26B	13	2	3		4			72	3	4		12			27	2	1		3	1			15		1	2	3																			168
27		2						4	2			6			6	1	1		1	1			6	4		9	1																			44
28A	9	1	2		3			16	1	2		8	1		4	3	4		3				1		1	2								2												63
28B	1	1					1	19	4	4		4	1		2	2	2	2	2	2			4			2	1				2															56
29	10	1	5		7			25	7	3		8	1		20	5	9	3	2	1			13	1	3	17	7							2												150
30	11	2	23		10			63	14	64		38	1		45	7	36	38	40	25	2		24	2	15	79	13	18			2		1	3	1			1	2	1	8	1	2	1		593
31	2		1					8	1						3	2		3	2				3		1	1					2			1					1		1					32
32	1							10		1						2							4			6		1																		25
33	14		1					24		2		4			8	3	2	1		1	1		6			5	5	1			1				1											80
34	6		3		2			23	2	13		4		1	8	3	5	5	7	1			7	1	1	8	1																			101
35	14		3		6		1	74	10	16		28			42		10	21	16	3	2		33	2	3	41	14		1		4			2					4	1			1			352
36	3		1					11		1		3	1			1			2				1	1	1	2	1	1			1															31
37	4		2		1			5	1	13		5			5	1	6	7					2		3	18	3				2															78
38	43	3	4		16			104	16	15		32			39	6	7	4	12	2			15	3		2	7				3	1			2				3	1						340
39	25		5		7			80	18	16	12	29			33	10	9	12	9	9	3		27	1	10	18	8	1							1				2	1			1	1		348
40	10				3			20		2		7			12	1			1				2			4	4				1															67
41	22	1	1		6			38	2	2		15	1		17	1	1		2				14		2	7	5				1			1	1											140
42	22	4	7		10		11	67	7	6		11			31	8	6	20	12	2	1		12	2	1	20	4	1		1		1			1				2	2			1			273
43	8				3		1	17	3	3		4			5		6	10	3				14		3	21	3												2				2			108
44	132	11	19		54		3	438	33	64		188			169	14	59	22	53	7			56	6	12	32	28	2			4	2	2	1	3				8	1	1		3		1	1,428
45					1			3	1	2		2			3			1	2				1	1		3	1					1		1												23
46	3	1						16	3	2		5			9	1	5	13	3	4			12	1		32	1				2			3	1								1			118
47			1		2			3	2	5		4			2	2	2	3	3	1			3			5	2			1				1												42
48 Lower	9		4		1		1	17	6	3		10			11	3	4	7	2	2			3	1	1	5	5								1				3							99
48 Upper	1				1			7	1	2		2			2	2	1		1				3			6	1												1							31
TOTAL	1,127	124	218	1	302	1	25	3,711	466	693	12	968	17	14	1,663	246	442	465	388	123	28	2	714	134	173	932	240	56	12	10	80	14	7	52	20	1	1	5	75	12	20	3	24	3	3	13,627

Table 14. Site 1Gr1X1. Flaked Stone Tools in Excavation Units.

PROVENIENCE / CATEGORY

Level	Unit	Hafted End Scrapers	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Cobble Scrapers/Knives	Heat Spall Scraper/Knife	Drill Fragments	Blanks	Arrow Point Preforms	Projectile Point Preforms	Perforators	Reamers	Gouge-Chisel-Wedge	Notched Flakes-Spokeshaves	Adze	Unidentified Bifaces
1	440N500		1DC							1DC,1HC	1DC		1DC		1YC,1HC	1HC		4DC,1HC
2						1HC			1DC				1DC					6DC,1DQ,1TQ,4HC
3		1TQ																3DC,1YC
4										2YC				1HC				1DC,1DQ
5																		1TQ
6																		
	Subtotal	1	1	-	-	1	-	-	1	4	1	-	2	1	2	1	-	23
1	450N500				1DC	1DC				1DC								4DC,1YC,1HC
2			1DC			2DC												8DC,1YC,2TQ,2HC
3																		
4																		
5			1HC		1DC													
6																		
7																		
8																		
	Subtotal	-	3	-	2	3	-	-	-	1	-	-	-	-	-	-	-	19
1	460N500		2DC	1DC					1HC									4DC,2YC,2HC
2			1YC					1DC		1DC,1HC	1DC				1HC			3DC,2TQ
3			2DC			1DC			2DC	1HC			1DC					1DC,2TQ
4		1YC	1YC								1HC							1YC
5														1TQ				
6																		
	Subtotal	1	6	1	-	1	-	1	3	3	2	-	1	1	1	-	-	16
1	480N500	1TQ	3YC	2DC		2DC	1YC		4DC		2DC		1DC,2HC					7DC,1TQ,1HC
2							1DC,1YC,1HC		1YC				1DC	1DC,1YC,1TQ				3DC
3					1DC										1HC			1DC,1HC
4																		
5			1DC							1HC	1YC							1TQ
6																		
	Subtotal	1	4	2	1	2	4	-	5	1	2	1	4	3	1	-	-	15
1	400N700		1YC															1DC,1TQ
2						1DC			1DC									1HC,1HC
3																		
4																		1DQ,1YC
	Subtotal	-	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	6
1	500N600															1DC,1YC		3DC
2							1DC		1DC									1DC,1HC
3																		1HC
4																		1YC
5																		
6												1HC		1TQ,1CC				1DC
7																	1YC	
	Subtotal	-	-	-	-	-	1	-	1	-	-	1	-	2	-	2	1	8
	TOTAL	3	15	3	3	8	5	1	11	9	5	2	7	7	4	1	1	87

Level	Unit	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knife	Heat Spall Knives	Blank	Perforators	Graver	Gouge-Chisel Wedge	Unidentifiable Uniface	Utilized Flakes	Utilized Blades	Utilized Cobble	Utilized Flakes	Utilized Heat Spalls	Other Knife Bifaces	Other Scraper Biface	Microlith	Splintered Wedges	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	Totals
1	440N500			1DC									7DC,1HC				5DC	2TQ								31
2									1YC				1DC				1DC								1CC	20
3			1YC						1HC	1YC	1YC					1DC										11
4													1YC									2YC			1HC	9
5													2YC									1YC,1HC				5
6																										-
	Subtotal	-	2	2	-	-	-	-	2	-	1	-	17	-	-	-	7	2	-	-	-	4	-	-	2	76
1	450N500									1HC			9DC	1DC			1DC									22
2													1DC				6DC	2DC		1YC				1HC	1CC	35
3					3YC								1DC,1HC													5
4											1HC		2DC,2HC								1YC	2YC	2YC		1CC	11
5				1DC					1YC				2YC,1HC	1DC												8
6			1YC										1HC								1YC					3
7																										-
8																										-
	Subtotal	-	1	1	1	-	-	-	1	1	1	-	25	2	-	-	9	2	-	1	2	2	2	1	2	82
1	460N500							1HC					6DC				2DC									30
2												1DC	6DC,1HC				2DC					1HC				22
3		1YC											1DC													12
4													1DC,2YC,1TQ				1DC						1YC			10
5			1YC										2TQ									1YC	2YC			8
6																										-
	Subtotal	1	1	-	-	-	-	1	-	-	-	1	20	-	-	-	5	-	-	-	-	2	3	-	-	71
1	480N500					1DC			2YC				8DC,6HC	1DC				1HC				1HC				47
2							1DC					1HC		1HC				1DC,2YC,1TQ	1HC				1YC			20
3													1HC	1CC												6
4			1YC									1YC					1DC									3
5																1YC					1YC					6
6													1YC													1
	Subtotal	-	1	-	-	1	1	-	2	-	-	2	16	3	-	1	1	5	1	-	-	2	1	-	-	83
1	400N700												1DC					1HC,1TQ								6
2													5DC				3DC		1DC							13
3																	1DC									1
4					1YC								1DC								1YC	1YC				7
	Subtotal	-	-	-	1	-	-	-	-	-	-	-	8	-	-	-	4	2	1	-	1	1	-	-	-	27
1	500N600												8DC	1HC	1DC											15
2			1HC									2DC	6DC,2YC,1HC				2DC		1DC							20
3																		1DC								2
4																										2
5																										-
6													1YC,1HC	1DC												7
7		1YC																								2
	Subtotal	1	1	-	-	-	-	-	-	-	-	2	20	3	1	-	2	1	1	-	-	-	-	-	-	48
	TOTAL	2	6	3	2	1	1	1	5	1	2	5	106	8	1	1	28	12	3	1	3	11	6	1	3	307

Table 15. Site 1GrIX1. Flaked Stone Tools in Features.

PROVENIENCE Feature	Hafted End Scraper	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knife	Cobble Scrapers/Knives	Hafted Drills	Other Drills	Drill Fragments	Blanks	Arrow Point Preforms	Projectile Point Preforms	Perforators	Reamers	Gouge-Chisel-Wedges	Choppers	Unidentifiable Bifaces	Cobble Scrapers	Flake Scrapers
2																		1DC		
3																				
5					1NC															
9					1DC											1YC		1DC		
10			3DC,1YC,1NC		1DC,1YC,1NC				1NC		2DC	2DC		1DC,1NC	2DC,1NC			2DC,2NC	2YC	1NC
11			1DC							1DC	3DC	1DC		3DC,1RC			1DC	7DC,1TQ	1NC	1DC
12	1TQ	1YC			1RC,1YC,2NC							1DC						6DC,1TQ		
13			1TQ					1RC							1YC					
15										1RC										
16											1NC			1DC				2DC		
17		1DC				1TQ					1DC			1DC		1YC		1DC	2DC	
18A										1TQ										1DC
18B																		1DC		
19																		1DC		
20																		1TQ		
21					2RC			1DC			1DC					1DC				
22		1NC								1RC										
23							1NC											1DC,1RC		
24A																				
24B							1DC				1DC			1DC		1DC		1DC		
24C				1DC														2DC,1TQ		
24D					1DC															
25							1DC											1DC		
26A																				1YC
26B		1DC		1DC	1DC				1YC									1DC		
28A					1DC															
28B							1NC													
30					1DC,1YC									1RC				1TQ		
31					1DC															
33								1TQ										1DC		
34																				
35																				
36					1NC									1DC		1DC		2DC,1TQ		
38					1RC		1DC										1DC	3DC		
39																				
40																				
41																		1DC		
42														1NC				1YC		
43																		1DC		
44							1YC					4DC,1NC				1RC		9NC,1TQ		
45																				
46																1RC		1TQ		
47																1DC				
48 Upper													1NC							
48 Lower							1DC			1DC								[illegible]		
TOTAL	1	4	7	2	19	1	7	3	2	5	9	8	1	12	4	8	2	53	5	4

PROVENIENCE Feature	Heat Spall Scrapers	Flake Scraper/Knife	Perforators	Gouge-Chisel-Wedge	Chopper	Adzes	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Heat Spalls	Other Knives Biface	Other Scraper Biface	Splintered Wedge	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	Pseudo Burin Spall	TOTALS
2																				1
3								1DC												1
5	1NC							4DC			2DC	1NC								9
9			2YC				1YC	1DC,2YC							2YC			1YC		12
10			1DC			1YC		7DC,2YC,2NC			6DC				1YC	3DC		1NC		49
11	2DC		3DC,1YC				2DC,1NC	21DC,2NC			5DC	1DC								59
12			1DC		1RC			7DC,1TQ		1DC	10DC				1YC					36
13								1DC,1YC												5
15								1DC	1DC						1TQ					4
16	1DC								1DC		1DC									7
17							1DC	6DC	1DC											16
18A																				2
18B							1DC													2
19							1DC													2
20										1YC										2
21			1RC					1DC			2DC				1YC					10
22								2DC			2DC									6
23								1DC			1DC									5
24A								3DC												3
24B			1DC					11DC,1YC					1DC	1YC	2YC				1DC	23
24C											1DC				1NC					6
24D																				1
25								1DC								1NC				4
26A								1DC			2DC									4
26B								1DC			1DC				1YC	1YC				9
28A												1DC								2
28B																				1
30								1DC,1YC			2DC,1NC				1YC					10
31				[illegible]				1DC												3
33		1DC																		3
34			1RC																	1
35								3DC,1RC	1DC		1DC									6
36	1DC																			7
38								5DC,1YC,1NC	1CC		5DC	1DC				1DC	1NC			22
39			1DC					3DC			1DC				1NC		1DC			7
40								1DC												1
41											1DC									2
42						1DC		1DC				1NC								5
43											1DC									2
44								12DC,1NC			10DC				1NC					33
45								1DC												1
46																				2
47																				1
48 Upper								1YC												2
48 Lower											2DC									6
TOTAL	5	1	12	1	1	2	7	115	5	2	57	5	1	1	13	6	2	2	1	397

Table 16. Site 1Gr1X1. Pecked, Ground or Polished Stone Tools in Excavation Units.

PROVENIENCE Unit	Hammerstone	Muller	Abrader	Adze Celt-	Celt Fragments	Sandstone	Bowl Fragments	Gorget Fragment	Sandstone Saw	Combination Anvilstone/Muller	TOTALS
450NR500											
2			1SS								1
3									1		1
440NR500											
1					1GR						1
4			1SS					1DC			2
460NR500											
2						1					1
4	1Q		1SS								2
480NR500											
1							1				1
5	1Q										1
400NR700											
3				1SS							1
500NR600											
2										1	1
4		1SS									1
6	2Q										2
TOTAL	4	1	3	1	1	1	1	1	1	1	15

SS = Sandstone
Q = Quartzite
DC = Dark Red Chert
GR = Greenstone

Table 17. Site 1Gr1X1. Ground Stone Tools in Features

PROVENIENCE	CATEGORY								
Feature	Hammerstone	Anvil Stone	Mullers	Metate	Pitted Stones	Abraders	Unidentifiable Ground Stones	Steatite Bowl Fragments	TOTALS
6					1SS				1
10			1SS			1SS			2
11						3SS	1SS		4
12							1SS		1
13			1SS						1
15							1SS		1
17			1Q						1
18A						1SS			1
24A		1SS							1
24D						1SS		1	2
25					1SS	1SS			2
26A					1He, 1Li				2
29					1He				1
30				1SS					1
38	1YC								1
39						1SS			1
42						3SS			3
42 Lower			1SS						1
TOTAL	1	1	4	1	5	11	3	1	27

YC = Yellow Chert
SS = Sandstone
He = Hematite
Li = Limonite

B. 1Gr2

Approximately thirty thousand pieces of stone were analyzed from Site 1Gr2. Assemblages from the Late Miller II Turkey Paw subphase and Middle Miller II Cofferdam subphase were identified. There were Archaic stage tool assemblages as well.

Miller I, Miller II, Gulf Formational and preceramic materials occurred. Artifacts representing the following projectile point clusters recovered at this site: Tapered Shoulder Cluster (Miller II); Expanded Haft Cluster (Miller IMiller II); Lanceolate Spike Cluster (Miller I-Miller II); Flint Creek Cluster (Late Gulf Formational-Late Archaic); Wade Cluster (Middle Gulf Formational-Terminal Late Archaic); Little Bear Creek Cluster (West Greene); Benton Cluster (Early Late Archaic); General Late Archaic; Morrow Mountain-White Springs Cluster (Vaughn); Bifurcate Cluster (Early Archaic); Kirk Cluster (Early Archaic); and Hardaway Cluster (Early Archaic).

The Flint Creek Cluster belongs with the Henson Springs component. A Late Archaic West Greene occupation is associated with the Little Bear Creek Cluster. Other components are not as well represented.

Class 1 and Class 4 points of the Late Woodland-Mississippian Cluster were predominant, especially the small triangular Madison var. Gainesville and Hamilton var. Gainesville points. The larger Class 2 and Class 5 forms and Class 10 (Pickens var. Pickens) forms also occurred.

Late Miller II Feature Cluster

Eleven features were associated and analyzed from Turkey Paw subphase contexts. The Miller II features intruded into the lower Archaic, Gulf Formational, and Miller I zones with mixture of these assemblages. There are so few artifacts in the Archaic zone, the Miller I or Gulf Formational components here that the "contamination" is probably not very serious. The artifacts from the following features are considered part of the Late Miller II Turkey Paw subphase: Features 36, 40, 41, 44, 54, 55, 61, 62, 63 and 68.

Fire Cracked Chert. Two hundred eight-six pieces of fire cracked chert weighing 621 g (mean wt. 2.17 g) was recovered. They resemble those produced experimentally. Feature 54 contained the largest amount of fire cracked chert.

Debitage. The collection (1,261 flakes) was divided into secondary decortication and bifacial thinning flakes (each constituted nearly 35 percent); primary decortication flakes (7 percent); other flakes (17 percent); the remaining two categories comprised less than 4 percent of the collection. Secondary decortication flakes associated with this phase occur in Dark Red Chert (60 percent); Red Chert (8 percent); Yellow Chert (13 percent); Tallahatta Quartzite (2 percent); and Miscellaneous (17 percent). Nearly 80 percent of the chert was thermally altered.

Manufacture and Use Modified Flaked Stone. Twenty-nine modified flaked stone tools (excluding projectile points) were recovered. These tools were comprised of 8 biface kn'ves, 2 uniface scrapers, 2 biface scraper/knives, 2 drills, 2 perforators, 9 unidentifiable biface fragments, 1 utilized flake and 3 cores.

The Late Miller II Turkey Paw subphase assemblage represented here is predominantly bifacial. Utilized flakes make up 3.4 percent of the modified flaked stone, whereas biface knives and unidentifiable biface fragments make up over 58 percent of the tool inventory. Of these, 66.6 percent were on cobbles, 20 percent were on flakes and 13.3 percent were on thermal spalls.

Projectile Points. Sixteen projectile points or fragments were recovered; 6 belong to the Tapered Shoulder Cluster. Out of these, 5 were Tombigbee Stemmed var. Tombigbee; the other was var. Turkey Paw. Other projectile point clusters represented include the Lanceolate Spike Cluster, Flint Creek Cluster and Morrow Mountain-White Springs Cluster. They are 31 percent of the projectile point classes. These are inclusive.

Five small arrow points were recovered. However, Feature 44 contained them as well as two Lanceolate Spike cluster points and one from the Tapered Shoulder cluster. This feature is of questionable context.

Modified Groundstone. A single chert cobble muller from Feature 40 and a piece of unidentifiable ground stone from Feature 62 were recovered.

Middle Miller III, Feature Cluster I

These features were chosen because of their close proximity to one another. There is considerable mixture with earlier assemblages. Nevertheless, Features 47, 57, 59, 64, 65, 66, 69 and 87 are considered to be Middle Miller III.

Fire Cracked Chert. Two hundred ten pieces of fire cracked chert weighing 432 g (meant wt. 2.05 g) were found.

Debitage. The collection (508 flakes) consisted of 49.6 percent secondary decortication flakes, 26.9 percent bifacial thinning flakes, 11.2 percent other flakes, 10.4 percent primary decortication flakes, and less than 2 percent from the other two categories.

Secondary decortication flakes occur in dark red chert (57.7 percent); miscellaneous chert (32.6 percent); yellow chert (5.9 percent); and red chert (3.5 percent). Between 85 percent and 90 percent of the chert was heat treated.

Manufacture and Use Modified Flaked Stone. Fourteen flaked stone tools (excluding projectile points) were identified. These included 3 biface scrapers, 1 uniface scraper, 3 biface knives, 1 drill, 1 preform, 1 perforator, 1 reamer and 3 unidentifiable biface fragments. Of the six

pieces used to either make the tools or used as tools, three were thermal spalls, 2 were cobbles and 1 was a flake.

Projectile Points. One whole projectile point was recovered. It was a Lanceolate Spike Cluster form. Three others were fragments. Four small 'arrow' points were recovered. Two were Hamilton *var. Gainesville* and the other two were fragments.

Modified Ground stone. One ground stone implement was recovered. This was a sandstone anvil found in Feature 57.

Middle Miller III, Feature Cluster II

This Middle Miller III group of pits includes Features 70, 75, 77, 78, 79, 81, 84, 86, 100, 101, and 107.

Fire Cracked Chert. Eight hundred fifty-two pieces of fire cracked chert weighting 1,113 g (mean wt. 1.3 g) were recovered from Features 84, 86, 100 and 101.

Debitage. The collection consisted of 2,146 flakes and was divided as follows: 50.8 percent secondary decortication flakes; 28 percent bifacial thinning flakes; 12.2 percent primary decortication flakes; 7 percent other flakes; and less than 2 percent amorphous and blade-like flakes.

Of the 1,091 secondary decortication flakes, 69 percent were Dark Red Chert, 3 percent were Red Chert, 4 percent were Yellow Chert, 2 percent were Tallahatta Quartzite, and 23 percent were Miscellaneous Chert. Nearly 90 percent of the chert was thermally altered.

Manufacture and Use Modified Flaked Stone. Thirty-eight pieces of flaked stone (excluding projectile points) were recovered. The composition of this collection was as follows: 5.2 percent were biface scrapers, 10.5 percent uniface scrapers, 10.5 percent biface knives, 5.2 percent biface knife/scrapers, 2.6 percent drills, 7.8 percent biface blanks, 2.6 percent biface perforators, 2.6 percent reamers, 2.6 percent gouge-chisel-wedges, 21 percent unidentifiable bifaces, 21 percent uniface perforators, 2.6 percent utilized flakes and 2.6 percent cores. Only the perforators and scrapers are not bifacial.

Technologically, tools were on flakes (52.6 percent), thermal spalls (10.5 percent) and cobbles (37 percent).

Modified Groundstone. Four pieces of ground stone were recovered. These included a sandstone muller from Feature 75, a sandstone pitted stone and a chert muller from Feature 70, and a piece of unidentifiable ground stone from Feature 101.

Projectile Points. Three large projectile points were recovered. These included one Tombigbee Stemmed *var. Tombigbee*, one Wade Cluster form and one fragment.

Twenty-six small arrow points were recovered: 31 percent were Madison var. Gainesville; 15.4 percent were Hamilton var. Gainesville; 19.2 percent were Class 1 and Class 4 points; 26.9 percent were Class 2 and Class 5 points; and 7.7 percent were Classes 8 and 12.

Middle Miller II, Feature Cluster I

This group includes Features 48, 52, 90, 95, 96, 98, and 111. These pits were subject to mixture from earlier occupations. This is not believed to have greatly affected our description of the Cofferdam subphase lithic assemblage.

Fire Cracked Chert. Three hundred sixty-one pieces of fire cracked chert weighing 533 g (mean wt. 1.47 g) were recovered.

Debitage. In this collection 1036 flakes were recovered. The collection is made up of secondary decortication flakes (45.9 percent), bifacial thinning flakes (26.3 percent), other flakes (16.1 percent), primary decortication flakes (10.7 percent), and amorphous and blade-like (less than 1 percent of the total).

Secondary decortication flakes occur in Dark Red Chert (71.6 percent); Red Chert (1.2 percent); Yellow Chert (7.6 percent); Tallahatta Quartzite (4 percent) and Miscellaneous Chert (19 percent). Over 90 percent of the chert was heated.

Manufacture and Use Modified Flaked Stone. Ten flaked stone tools (excluding projectile points) were recovered. Of these 10 percent were reamers, 50 percent were unidentifiable biface fragments, 10 were percent uniface scrapers, 20 percent were uniface perforators and 10 percent were cores.

Technologically, 50 percent were on flakes, 25 percent were on thermal spalls and 25 percent were on cobbles.

Modified Groundstone. One sandstone muller was recovered from Feature 48.

Projectile Points. Twelve arrow points were recovered: 33 percent were Class 1, Madison var. Gainesville points. The rest of the collection consisted of Classes 3, 4 , 8 and fragments.

Lithic Artifacts From Other Proveniences

Lithic artifacts were also recovered from surface collections, excavation units, a patch of undisturbed midden designated Midden Area I, and other features (burials, post holes, etc.).

Excavation Units

Debitage. A collection of 8,393 flakes was recovered. The upper two

levels were usually Miller I, Late Miller II, Middle Miller III and Late Mississippian, except in units 550N460E and 540N460E, where the upper 2 ft contained Woodland and Mississippian artifacts. The lower levels contained Gulf Formational and Archaic artifacts.

The Miller and Archaic horizons seem to be associated with the use of different resources (Fig. 52). Units 550N460E and 540N460E tend to skew the distribution somewhat. Chert type DRC makes up a disproportionate amount of the Level 4 chert assemblage. It should not occur at this high a frequency. Thermal alteration in the form of dark red chert increases in the upper levels.

Data from four excavation units suggest differences in raw materials and flake typology from the Archaic to the Woodland. The proportion of primary decortication flakes is about the same in the Miller and Archaic levels (12.5 and 13.3 percent), but of these primary decortication flakes, 50.4 percent are of dark red chert in the upper levels, whereas only 5 percent occur in the lower levels. Secondary decortication flakes comprise 46.9 percent of the Miller level flakes but only 38.6 percent of the Archaic flakes are of this type. A comparison of bifacial thinning flakes suggests that, although they occur in almost equal proportions during the two stages, bifacial thinning flakes of Tallahatta Quartzite and yellow chert occur twice as often in the Archaic levels as they do in the Miller levels. Other flakes are twice as frequent in the Archaic levels and half of these are of Tallahatta Quartzite, but less than a quarter are yellow chert. But since half of the category other flakes in Levels 1 and 2 are of Tallahatta Quartzite, this may not have any significance. The various horizons may also be hopelessly mixed and the Tallahatta Quartzite may have been introduced from an earlier horizon.

Manufacture and Use Modified Flaked Stone. Three hundred nine modified flaked stone tools (excluding projectile points) were recovered. Twenty-six of these are products of an Archaic cobble core industry. The others are from Miller I, Miller II and Miller III proveniences with an admixture of Late Mississippian artifacts.

Most of the flaked stone tool categories were found in the midden accumulation. Tools made from heat treated chert occur most frequently in Levels 1 to 4. The non-heat treated cobble core tools occur most frequently in the Archaic levels. Uniface flake tools, other than utilized flakes, occur seldom in the Archaic zone.

Projectile Points. One hundred fourteen projectile points were recovered. The arrow points in the midden came from Levels 1 and 2 for the most part. Many were Class 1 and Class 4, the small Madison var. Gainesville and Hamilton var. Gainesville forms. The larger points were confined to Level 2 or lower. Lanceolate Spike Cluster, Expanded Haft Cluster and Tapered Shoulder Clusters occurred in Levels 2 and 3.

Wade, Flint Creek and Little Bear Creek Cluster forms were scattered throughout Levels 2 through 5. Two Class 99 forms with excurvate blades were found in the upper two levels. One Class 114 (Benton Cluster) and one Class 128 (Morrow Mountain-White Springs Cluster) were found in Level 4. Bifurcate, Kirk and Hardaway Cluster forms were found in Levels 4

through 7.

Groundstone Artifacts. Thirty ground stone tools including hammerstones, anvilstones, a muller, a metate, combination pitted stone/mullers, abraders, celt fragments, a discoidal, sandstone bowl fragments and numerous pieces of unidentifiable ground stone were recovered.

These artifacts occur most frequently in the upper levels although they are found in the Archaic strata as well.

Burial Associations. Two Class 3 point fragments were with Burial 20; a Class 23 and a Class 58 projectile point were associated with Burial 26.

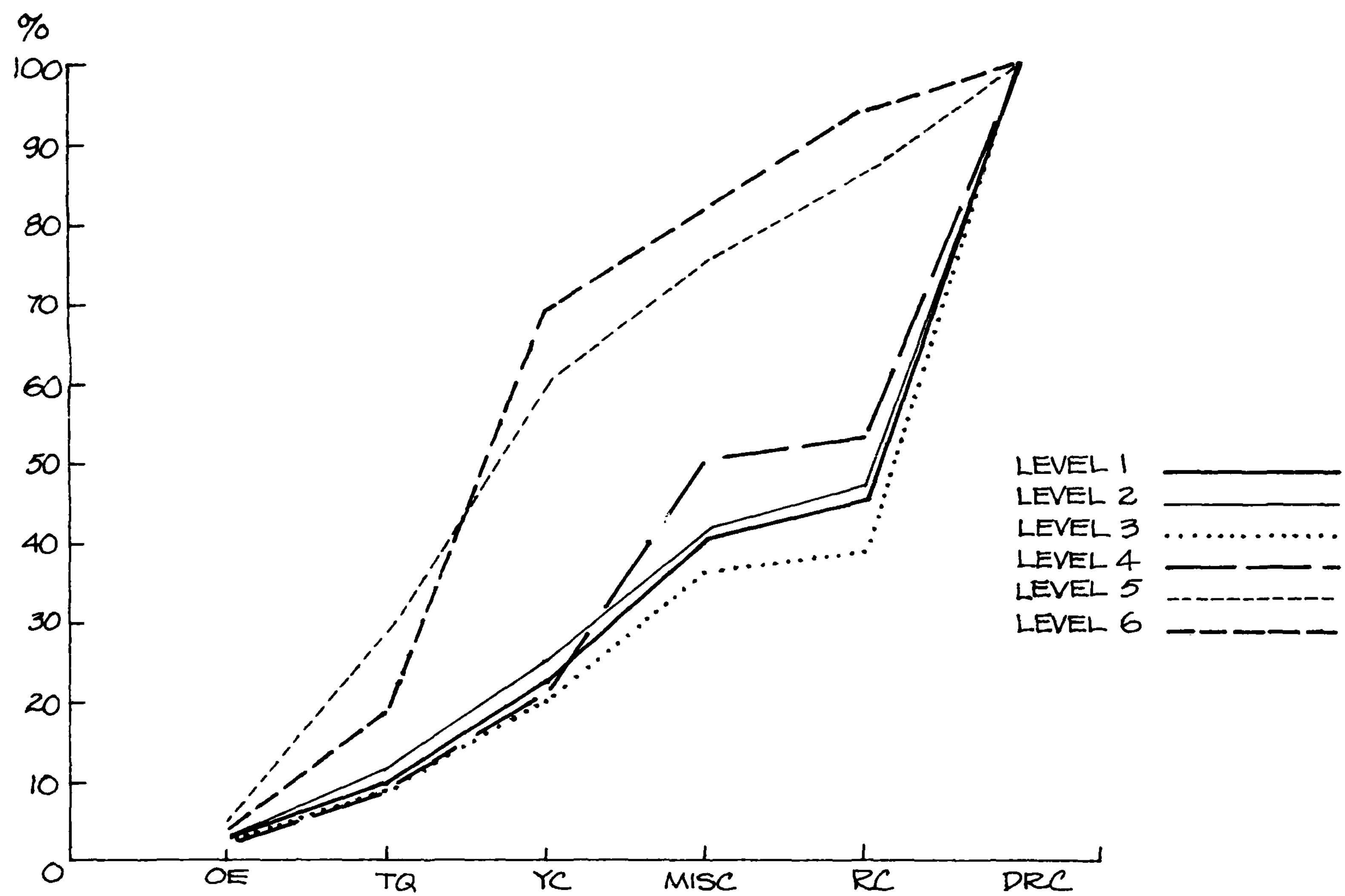

Figure 52. Site 1Gr2, Cumulative Percentage Graph by Level and Chert Type.

Table 18. Site 1Gr2. Distribution of Arrow Points.

	Class																						
Provenience	1	2	3	4	5	6	7	8	9	10	12	13	15	17	18	19	20	40	168	169	170	171	Total
90R190																							
Level 3									1														1
Subtotal	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
105R170																							
Level 2				1																			
Subtotal	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	1
105R185																							
Level 2		1																					1
Subtotal	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
550N320E																							
Level 2				1																			1
550N360E																							
Level 1				1																			1
Level 2														1									1
Level 3																						2	2
Subtotal	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	4
540N460E																							
Zone A											1								1				2
Zone B	1																						1
.8-1.0							1															1	2
1.0-1.2																				1			
1.2-1.4	1																						1
Subtotal	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	1	7
550N460E																							
Level 1						1															1		2
Level 2	1	1		3	1	1							2						1				10
Level 3	1	1					1	1									1		6		1	4	16
Level 4	1	1												1									3
Subtotal	3	3	0	3	1	2	1	1	0	0	0	2	0	1	0	0	1	0	7	0	2	4	31
530N480E																							
0.0-0.3				1																			1
0.8-1.0				1																			1
Subtotal	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
540N480E																							
0.0-0.4	3																						3
0.4-0.8					1																		1
0.8-1.0					1																		1
Subtotal	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
550N480E																							
Level 1	1																						1
Level 2		1																					1
Level 3												1											1
Subtotal	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
570N480E																							
Level 2	1							1															2
Subtotal	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
590480E																							
Level 1				2				1															3
Level 2	1			1																			2
Subtotal	1	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
660N340E																							
Level 1				3															1				4
Level 2																			1				1
Level 3																			1				1
Subtotal	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6
610N480E																							
Level 1											1												1
Level 2								1															1
Subtotal	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
630N480E																							
Level 2	1																						1
Subtotal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
790N360E																							
Level 2				1																		1	2
Subtotal	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Midden Area I																							
Unit 2										1													1
Unit 3		1		1																			2
Features																							
Feature 4																	1						1
Feature 44	2			3																			5
Feature 46										1													1
Feature 47					1																		1
Feature 48			1																1				2
Feature 64																			1			1	2
Feature 76										1													1
Feature 77				1																			1
Feature 78																					1	1	2
Feature 83	1																						1
Feature 84		2		1	1																	1	5
Feature 87				1																			1
Feature 90				1																			1
Feature 91		1		1								1							1				4
Feature 94																					1	1	2
Feature 96	2							1														2	5
Feature 97																			1				1
Feature 98	2																						2
Feature 100	2	1			1			1			1								2	1		3	12
Feature 101	1	2																	2	1			6
Feature 104																			1				1
Feature 108																						2	2
Feature 114	1	1		1	2																		5
Burial 20																			1				1
Burial 25																				1		1	2
Surface	4	2	2	1	1				1	6	1	1	1		1	1	1		1		1	1	26
Subtotal	15	10	3	11	6	0	0	2	1	9	2	2	1	0	1	1	1	0	11	3	3	13	95
Class Total	27	15	3	26	9	2	2	6	2	9	4	5	1	2	1	1	2	0	22	4	5	21	169

Table 19. Site 1Gr2. Distribution of Projectile Points.

Provenience	22	23	24	25	26	27	28	29	31	[illegible]	38	39	[illegible]	[illegible]	42	[illegible]	[illegible]	51	52	54	[illegible]	56	[illegible]	[illegible]	60	61	64	66	[illegible]	68	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
105R190																																								
Level 4																																								
Subtotal																																								
130R230																																								
Level 3		1													1																									
Subtotal		1													1																									
550N320E																																								
Level 1																																								
Level 2		1																																						
Level 3																																								
Level 5																							1																	
Subtotal		1																					1																	
550N160E																																								
Level 3																					1																			
Subtotal																					1									1										
540N460E																																								
Zone B																																								
B-1.0																							1																	
1.0-1.2				1																																	1			
1.2-1.4								1																																
1.4-1.6																																								
1.8-2.0		1																																						
2.2-2.4																																								
3.6-3.8																																								
Subtotal		1		1				1															1														1			
550N460E																																								
Level 1																							1																	
Level 2																							1										1							
Level 4							1																																	
Level 5					1																																			
Level 7																																						1		
Subtotal					1		1																[illegible]										1					1		
550N480E																																								
1.0-1.2		1		2																				[illegible]																
1.2-1.4																							1																	
2.4-2.6																																								
2.6-2.8																																								
Subtotal		1		2																			1	2																
540N480E																																								
0.4-0.8																							1																	
0.8-1.0																							1																	
1.2-1.4																																								
2.4-2.6																																		1						
3.0-3.2																																				1				
Subtotal																							2											1		1				
350N480E																																								
Level 1																																								
Level 2							1																																	
Level 7																																								
Subtotal							1																																	
370N460E																																								
Level 1																																								
Level 2		1								1							1	1																1						
Level 4																																								
Subtotal		1								1							1	1																1						
660N340E																																								
Level 2																																								
Level 3																																								
Level 7																																								
Subtotal																																								
610N480E																																								
Level 2											1																													
Subtotal											1																													
630N480E																																								
Level 4																																								
Subtotal																																								
790N360E																																								
Level 2																					1																			
Level 3																																								
Level 4																																								
Level 6																																								
Level 7																																								
Subtotal																					1																			
Features																																								
Feature 5																																								
Feature 9																																								
Feature 19						1																				[illegible]														
Feature 20				1																																				
Feature 27																																								
Feature 35												[illegible]																												
Feature 37		1																																						
Feature 38																																								
Feature 40																																								
Feature 42																																								
Feature 43																											1													
Feature 44		1	1																	1	1																			
Feature 46								1																																
Feature 45-a																							1																	
Feature 45 c																							1																	
Feature 49																																								
Feature 50																													[illegible]											
Feature 51																																								
Feature 54																						1	1																	
Feature 55																																								
Feature [illegible]																							[illegible]																	
Feature 64																																								
Feature 66		1																																						
Feature 70																																								
Feature 71																																								
Feature 80																																								
Feature 87																																								
Feature 89																																								
Feature 91	[illegible]							[illegible]																																
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Table 20. Site 1Gr2. Introduced Rock in Excavation Units.

PROVENIENCE Levels/Zones Unit	Firecracked/Crazed Cherts CT	Firecracked/Crazed Cherts WT	Cracked and Irregularly Flaked Cobbles/Cobble Fragments CT	Unmodified Sandstone CT	Unmodified Sandstone WT	Unmodified Chalk CT	Unmodified Chalk WT	Hematite CT	Hematite WT	Limonite CT	Limonite WT	Cobble-Pebble WT	Steatite CT	Steatite WT	Greenstone CT	Greenstone WT	Siltstone CT	Limestone CT	Limestone WT	TOTALS CT	TOTALS WT
550N320E																					
Level 1	245		11	15	19	73	307					2,470						1	2	345	2,798
Level 2	374	526	32	27	73	103	740					8,190.3	1	0.7						537	9,530
Level 3	107	114	4	5	20	8	49					2,367								124	2,550
Level 4	34	55	10	8	48	3	203					1,150.2								55	1,456.2
Level 5	43	52		16	106							2,781.7								59	2,939.7
Level 6	15	17	8	6	21							568.6								29	606.6
Level 7	2	2	7									475.5								9	477.5
Level 8	1	1	4									390								5	391
Subtotal	821	767	76	77	287	187	1,299	-	-	-	-	18,393.3	1	0.7	-	-	-	1	2	1,163	20,749
550N360E																					
Level 1	37	122	7	8	172	4	8					438.3			1	1				57	741.3
Level 2	202	364	7	21	47	12	76					1,262.4			2	1				244	1,750.4
Level 3	103	130	8	18	98	6	32					1,422.9	4	7	1	2				140	1,691.9
Level 4	17	50	7	7	11	6	58					1,143	7	101						44	1,363
Level 5	6	11		4	52							322.4								10	385.4
Level 6	4	6	4									245.4								8	251.4
Level 7	8	5	4	4	111							3.3								16	119.3
Level 8	5	3	2	6	20							309.8								13	332.8
Level 9												192.8								-	192.8
Subtotal	382	691	39	68	511	28	174	-	-	-	-	5,340.3	11	108	4	4	-	-	-	532	6,828.3
550N460E																					
Level 1	181		20	19		117		1		1		953.3								339	953.3
Level 2	164		30	30		59				1		1,761.3								284	1,761.3
Level 3	536		21	13		33						608.8								603	608.8
Level 4	494		30	8		29		3									1			565	-
Level 5	26		5	6		1		1				649.3								39	649.3
Level 6	7		8	2								583.1								17	583.1
Level 7	28		12	7								1,718.1								47	1,718.1
Level 8	6		8	3								851								17	851
Level 9	1											150.2								1	150.2
Subtotal	1,443	-	134	88	-	239	-	5	-	2	-	7,275.1	-	-	-	-	1	-	-	1,912	7,275.1
540N460E																					
Zone A(0.0-0.5)	63	62	23	28	116	202	172			1	6	898								317	1,254
Zone B(0.5-0.8)	75	106	9	11	8	15	36					204			2	0.5				112	354.5
(0.8-1.0)	123	187	7	7	31	14	101			1	1	349			2	2				154	671
(1.0-1.2)	182	302	13	10	47	75	562	3	1	1	28	429								284	1,369
(1.2-1.4)	38	55	6	12	66	26	164	1	0.2			256								83	541.2
(1.4-1.6)	23	110	2	6	34	3	9					200								34	353
Zone E-1(1.8-2.0)	19	44	4	3	11	1	17	1	2	1	1	418								29	493
Zone E-2(2.0-2.2)	22	94	4	8	15							645								34	754
Zone E-3(2.2-2.4)	3	1	4	2	25	1	5					155								10	186
Zone E-4(2.4-2.6)	4	2	2	1	2							221								9	225
Zone E-5(2.6-2.8)	6	7		4	0.5							339								10	346.5
Zone E-6(2.8-3.0)	2	4	8	1	71							410								11	485
Zone E-7(3.0-3.2)	9	24	7	5	3	1	0.2					552								22	579.2
Zone E-8(3.2-3.4)	2	3	4	1	2							599								7	604
Zone E-9(3.4-3.6)	3	4	7	6	22							434								16	510
Zone E-10(3.6-3.8)	4	6	7	2	1							480								13	487
Zone E-11(3.8-4.0)	1	3	3									212								4	215
Zone F-12(4.0-4.2)	1	1										73								1	74
Subtotal	580	1,015	110	109	504.5	338	1,066.2	5	3.2	4	36	6,874	-	-	4	2.5	-	-	-	1,150	9,501.4
660N340E																					
Level 1	93	185	7	8	19							297.7								108	501.7
Level 2	174	457	3	11	43	13	180					410.9								201	1,090.9
Level 3	271	400	11	59	315	89	651					953.3								430	2,319.3
Level 4	16	18	2	15	111	14	31					305.5								47	465.5
Level 5	5	18	2	25	171					1	7	325.6								33	521.6
Level 6	12	18	6	1	2							411.5								19	431.5
Level 7	23	54	23	23	236							2,433								69	2,723
Level 8	9	18	6	5	2.5							444.7								20	465.2
Subtotal	603	1,168	60	147	899.5	116	862	-	-	1	7	5,532.2	-	-	-	-	-	-	-	927	8,518.7
[illegible]90N360E																					
[illegible]	3	11	1	1	0.9	11	16					95.5								16	123.4
Level 2	27	93	11	7	160			1	2			375.5								46	630.5
Level 3	15	27	13	13	125	1	2					484.2								42	638.2
Level 4	7	5	5	17	3.7					2	1.0	861.5								31	871.2
Level 5	20	26	18	23	54							1,592								61	1,672
Level 6	34	38	24	20	128			1	0.3			3,237.6								79	3,403.9
Level 7	11	0.6	5	6	0.5							622.8								22	623.9
Level 8			6									177.2								6	177.2
Level 9			5									357.8								5	357.8
Subtotal	117	200.6	88	87	472.1	12	18	2	2.3	2	1.0	7,804.1	-	-	-	-	-	-	-	308	8,498.1
TOTAL	3,946	3,841.6	507	576	2,674.1	920	3,419.2	12	5.5	9	44	51,269.0	12	108.7	8	6.5	1	1	2	5,992	61,370.6

Table 21. Site 1Gr2. Debitage in Excavation Units.

PROVENIENCE: Levels/Zones, Pit	CATEGORY: Primary Decortication Flakes						Secondary Decortication Flakes								Bifacial Thinning Flakes									Other Flakes									Amorphous Flakes								Blade-like Flakes					TOTALS
	DC	RC	YC	WC	AC	(XQ-MQ)	DC	RC	YC	TQ	WC	AC	OE	(XQ-MQ)	DC	RC	YC	TQ	WC	AC	OE	FC-BC	(XQ-MQ)	DC	RC	YC	TQ	WC	AC	OE	FC-BC	(XQ-MQ)	DC	RC	YC	TQ	WC	AC	OE	(XQ-MQ)	DC	RC	YC	TQ	WC	
540N460E																																														
0.0–0.5 (Zone A)	13		2	1			41	2	5		[illegible]				19	1	2		4					3	1	2	3	3								1										125
0.5–0.8 (Zone B)	15	1	5	3		1	76	1	12		14				33	2	6				1	1		6	1	1	2	1													1					187
0.8–1.0	23	2	2	7			126	9	6		36				32	2	2	3	10					7	1	1	7	3													2					281
1.0–1.2	30	3	7	11			210	27	18		60				52	10	9	9	14		1			13	3	3	12	5							1	2					5		3		2	521
1.2–1.4	9	2	1	2			50	4	9		14				17		9	9	5					5	3	3	10	2									1				1				1	157
1.4–1.6	2		2				19	1	4		3			2	6	1	5	7	5		1					1	17	2								2					3				1	83
1.6–1.8																																														-
1.8–2.0	2		2	1			6	1	1	1	2				6	2	5	14	1		1			1			27	2					1													76
2.0–2.2	1						3	1	3		4			1	2			9									10	3								2					1					39
2.2–2.4				1					1							1		2									7									1								1		14
2.4–2.6							1											1	1							1	7	1																		14
2.6–2.8			1	1			2	1										2	1			1				1	2																			12
2.8–3.0			2	1					4		1				1									1		3	2																			15
3.0–3.2			3	2					7		2		1	2			3				1		1		1			1															1			25
3.2–3.4			3					1	9		2						3		1				1			1	2					1								1						25
3.4–3.6		1	3						7		1			2	1	1	5		1				1																							23
3.6–3.8			1	1				1	6					2	1											1	1	1																		15
3.8–4.0			1				1		3		1						2																				1									9
4.0–4.2			1					1											1							1																				4
Subtotal	95	9	36	33	-	1	536	50	98	1	165	-	1	9	170	20	51	57	49	-	5	2	3	36	10	19	109	24	-	-	-	1	1	-	1	8	2	-	-	1	13	-	4	1	4	1,625
550N320E																																														
1	5		2	3			46	9	18		16		1	2	23	4	13	5			2	1		6		3	18	7		1		1			2	1										189
2	26	4	9	14			61	16	40	1	28			4	31	4	28	13	23		5			21	1	3	30	16		2	1					2	1				1					377
3							4		6						3	1	2	2			1			3		1	5	1									1								1	31
4		4	4				2	3	9		4				1		4	1	3					1			2	2		1						1			1							43
5	1	2	19	5			5		26		4			1	7	1	5	2	6		1			3		3	7	8		4				3			1		1				1			116
6	1		3				4				1				3		8		3		1					21		3						1	1					1			1			52
7			3						1																																					4
8			2												1																															3
9																																														-
Subtotal	33	10	42	22	-	-	122	26	100	1	53	-	1	7	69	10	52	23	35	-	10	1	-	34	1	31	62	37	-	4	1	1	-	4	3	4	3	-	2	1	1	-	2	-	1	815
660N340E																																														
1	8	2	2	2			53	3	3						20		6	3	10		2			5		2	4	5	6	1				1										1		139
2	26		4	6			80	7	23		25	1			26	3	12	5	4	13				8	1	4	13		7	1						5		1			1					280
3	30	7	25	[illegible]	1		147	19	42		29		3		56	9	32	12	19	20	4	1		21	5	8	37		28		1	1		2		5		2			3	1			2	595
4	1		2		1		11	2	8		7					6	3	5	4	1	2	1		2		3	14		6					1						1						81
5			3				1	4	7		3						3	6	4			1			2	1	18	1																		54
6			2				1	2	4		5				1		2	3			2				4	8	4																			38
7	2		10	2			3	7	20		10			1	3	1	9	2	1		3			2	1	6	2	1							1	3										90
8	1		2				1	1	8		3				1	1	1		2		1				1	3									1											27
Subtotal	68	9	50	17	2	-	297	45	134	-	92	1	3	1	107	20	68	36	44	34	14	6	-	38	14	35	92	7	67	2	1	1	-	6	2	13	-	3	-	1	6	1	-	1	2	1,304
550N360E																																														
1	[illegible]	1		3			19		6		2				8	3	1		4					3			3	1				1														62
2	26	3	3	15			104	12	31	1	35			1	57	3	14	12	17		4	4		11	2	1	35	8			1		2			7					2					411
3	7		1	10			28	4	9		7			2	11		6	7	10		4	5		3			17	6								1				1						139
4	1			2			2		2		3			2	2			2	2								11	2			1					1										33
5				2		1	1				3			5	3			1	1								2					2								1						22
6								5	2		7					2	2	1									1	5		1										1						27
7		5	1	1			6	5	5		10		1		1		2		8					4	3	1	1	5																		59
8	1	1		1			4	1	1		12						2		2						1			5																		31
9							2		1																		1																			4
Subtotal	42	10	5	34	-	1	166	27	57	1	79	-	1	10	82	8	27	27	44	-	8	9	-	21	6	2	71	32	-	1	2	3	2	-	-	9	-	-	-	3	2	-	-	-	-	788
790N360E																																														
1	[illegible]			2			17	2			4				6	1								2			1	1																		40
2		15	3	4			51	6	6		26				14	7	1	2	9					9	1	3	11																			168
3	6	1	3	4			30	5	12		10				7	2	2	17	1						2		20	4								1							1			130
4		3	5	1			5	6	17	1	3			1	1	1	2		1		1				4	1	10	1								1										67
5	1	2	10	1		1		12	21		13			2		6	4	6	3						7	12	23	4								3										131
6		9	20	2		1	5	8	71		4			2		3	7	7	5		1				5	10	31	11		3							1						1			208
7		3	4	1			1	7	16		3			1	1	3	2	1						1	2	4	10	1				1		1	1		1						1			66
8				2							1																																			3
9	1								1						1									1																						4
Subtotal	14	13	45	17	-	2	110	46	144	1	65	-	-	6	30	25	18	33	19	-	2	-	-	13	21	30	106	22	-	3	-	1	-	1	1	5	2	-	-	-	-	-	3	-	-	817
550N460E																																														
1	30	2	12	9		1	91	2	12		22			2		1	6	3	17		1			17	3	5	11	11			1		4			11	1			1	2			1		280
2	60		9	11		1	162	6	19		26				57	3	5	2	15		1			15		3	8	6		1			1	1		2									1	414
3	154	2	20	36			572	9	49		140				202	2	30	4	77					50		5	10	26			1		6	1		1					3				5	1,409
4	58		12	19			291		29		85			1	100	2	22	16	29			3		36		11	17	19		1			4		1	4	1				9		4		3	777
5	3		3	4			17	1	4		4				7			11	1		1			3	1	1	11	1		1						1										75
6	1		2				3		1									2				1				1	1	1																		13
7		2	7					3	5		1			7		4	3	2	2				2	1	2	2	2					5			1					1						52
8	1	1	3					5	6		3			1		1	3								3	2	1					4														34
9								1																				1																		2
Subtotal	311	7	62	79	-	2	1,136	27	125	-	281	-	-	11	366	13	69	60	141	-	3	4	2	122	9	30	61	65	-	3	2	9	15	2	2	19	2	-	-	2	14	-	4	1	9	3,055
TOTAL	563	[illegible]	245	202	2	6	2,367	221	658	4	735	1	6	44	824	96	285	212	332	34	42	20	5	264	61	147	501	187	67	17	6	16	18	11	9	58	9	3	2	8	34	1	13	3	16	8,404

Table 22. Site 1Gr2. Introduced Rock in Features.

PROVENIENCE	CATEGORY																						
	Firecracked/Crazed Chert		Cracked and Irregularly Flaked Cobbles/Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Unmodified Breccia		Hematite		Limonite		Cobble-Pebble	Petrified Wood	Steatite		Siltstone		Limestone		TOTALS	
Feature	CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT
24	4	8												1								4	9
25	10	6	1	2	44									3								13	53
26	6	3		5	1	7	122			1	1	1	1	58								20	186
27				1	10	5	227							17								6	254
28	10	13				1	1							15								11	29
29	2	4	1	1	58									51								4	113
30	8	5	2			3	7							221								13	233
31	6	3	1			1	2							41								8	46
32	6	10												141								6	151
33	1	3												17								1	20
34	1	0.4	1											17								2	17.4
35	19	78	5	8	45	5	96							223				1	14			38	456
36	16	12	12	30	44	2	0.1			1	3	1	0.1	376		1	0.2					63	435.4
37	4	50	2	4	5									86								10	141
38	5	14	3	4	8									123								12	145
39	3	13	2	2	8	5	39							60								12	120
40	8	54	10	52	109	4	33							576								74	772
41	19	21	4	5	58									64								28	143
42	6	10	1	7	290	11	88							214								25	602
43	14	74		3	146	2	9							176								19	405
44	29	69	7	9	70	8	43							202								53	384
45	8	9	6	2	28									164								16	201
46	76	142	6	17	93	4	50							391								103	676
46A	23	48	6	3						3	18			91								35	157
46B	9	16	1	4	6	2	55											2	1			18	78
46C	12	16		7	81	1	11					1	2	157								21	267
47	4	7	2											20								6	27
48	17	25	2											105								19	130
49	157	216	1			6	332			1	1	7	9	476	1							173	1,034
50	43	142	4	7	280	2	83							248								56	753
51	4	2	1											29								5	31
52	13	32	2											40								15	72
54	136	304	18	18	572	3	70							408								175	1,354
55	22	85	4	5	63	6	215							120								37	483
56	3	1	6	6	2	1	4							42								16	49
57	17	38												64								17	102
58	1	0.3	2	2	0.3	1	1							49								6	50.6
61	24	17	4	4	25									72								32	114
62	12	33	1	2	102	1	12			1	7			115								17	269
63	12	20	2	4	6									170		4	1					22	197
64	78	212	5	5	1	5	20							388								93	621
65	48	81	1	4	87									305								53	473
66	37	44	1	4	47					2	7	1	1	43								45	142
68	8	6												67								8	73
69														3								-	3
70	30	34	3	2	8							1	1	46								36	89
71	1	0.2		5	41	1	1							72								7	114.2
75	59	89	2	3	12					1	0.3			42								65	143.3
76	8	4	3	141	343					4	167			119								156	633
77	21	17	1	1	1									29								23	47
78	96	91	2	1	4									104								99	199
79	13	37	2											70								15	107
80	23	9	3			3	15							87								29	111
81	1	2												4								1	6
82	13	21												69								13	90
83	28	48	2	2	2	5	29			4	1			157				1	2			42	239
84	97	146	6	6	43.2	1	15			1	6			141								111	351.2
86	157	198	9	3	50			1	40					203								170	491
87	26	50	2	1	8									111								29	169
88	[illegible]	2		1	3									1								3	6
89														7								-	7
90	[illegible]	60	5	1	55	21	44							206								67	365
91	96	119	13	6	66	8	24			3	3	2	1	450						9	1,041	137	1,704
92				1	2									26								1	28
93	6	6	1	1	53									92								8	151
94	136	172	11	14	51	3	6			3	0.1			470								167	699.1
95	23	34	2							1	1			58								26	93
96	110	181	6	8	28									133								124	342
97	27	46												20								27	66
98	22	29		2	2									58								24	89
99	15	36		3	59									117								18	212
100	170	231	10	3	20	4	399					1	5	272								188	927
101	195	265	8	9	61	5	100			5	18			449	1							223	893
102	60	89	5	9	92	3	13							604								77	798
103	7	3												57								7	60
104														9								-	9
105	25	18	2											3								27	21
106	2	7	3	1	24	2	2							241								8	274
107	13	3												17								13	20
108	22	43	1											107								23	150
109	15	13	1	9	56	7	316			1	0.3			191								33	576.3
110			1	1	3									56								2	59
112	21	23	2	2	90	11	43							153								36	309
113	6	6	2			6	13															14	19
114	150	216	3	9	47	16	111			1	1			285						2	5	181	665
115	9	8	2	3	9	2	225							232								16	474
116	5	6	2	7	29									72								14	107
117	2	5												3								2	8
118	14	10												8								14	18
119	24	43	3											324								27	367
120	4	3				7	29							1								11	33
122	78	86	2	1	0.1	12	84							196								93	366.1
126	37	143	1	3	5	2	77							219								43	446
128	52	62	2	1	1	3	65			2	0.6	3	10	202								63	340.6
TOTAL	2,902	4,665.9	250	487	3,557.6	208	3,13[illegible].1	1	40	35	235.3	18	30.1	12,842	2	5	1.2	4	17	11	1,046	3,903	25,566.2

Table 23. Site 1Gr2. Debitage in Features.

PROVENIENCE	CATEGORY																																												
	Primary Decortication Flakes						Secondary Decortication Flakes								Bifacial Thinning Flakes									Other Flakes								Amorphous Flakes							Blade-like Flakes						
Feature	DC	BC	YC	TQ	NC	OQ-NQ	DC	BC	YC	TQ	NC	AC	OE	OQ-NQ	DC	BC	YC	TQ	NC	AC	OE	PC-BC	OQ-NQ	DC	BC	YC	TQ	NC	AC	OE	OQ-NQ	DC	BC	YC	TQ	NC	OE	OQ-NQ	DC	BC	YC	TQ	NC	OE	TOTAL
24							3								1									2																					6
25	4						4				2				4		2							1			2									1									20
26	2		1				3		1		3				1	1			2		1						2			1						1									19
27									1																																				1
28	6				1		9				1				8		1							2			2																		30
29									1							1												1																	3
30									1		1																1																		3
31					1		1								2		1	5																											10
32															1		1										1	1																	4
33																										1																			1
34	1																										1																		2
35	2		1				8	2	4						11	3	4	11	1					1	1		7								1						1				58
36	2		2	1	2		6		6		4				10	1	6	13	1	1				2		1	21	2							2										83
37			1		1		1	1	3		1						4	1									2														1				16
38					1		1		5							1	1	1	3					1			4																		18
39			2		3		3		8		2			1	3		6	2	4					1		1	3	1																	40
40	1		2		2		12	2	14		9				9	5	12	22		14	2	1		2	1		32	7				1	1		4				1						156
41	4		3		3		37	3	8		13			1	11	2	4	3	6	9				5			4	1											3						120
42			3		2		2		8		6	1		1		1	10	1	5			2		1			8	6																	57
43					2		10		9		5				8	1	6	4	4								1	1				1			1										53
44	3		1		3		18	2	7	1	5			2	11	3	4	7	5		1			3	1		11	1						1	2				1		2				95
45	4		1		1		6	12	26		12				5	6	25	3	3		1			5		6	2	2		1					1				1	1	3				127
46	16		8		1		63	2	35	1			1		36		42	9	25	3	8			8		8	15	7	4					3		1			1		2		1		298
46A	7		4				19		20		9				23		13	6	6	2	2			8		5	3	4	1					4										1	137
46B			1				7		3		5				8		7	3	2					5		1	4	5							2			2							55
46C					1		7	1	5		5				8		4	2	2		2			2		4	6	4											1		1				55
47	1				1		8				1				5									3			2	2											1						24
48	1				1		12				2				19				4					5			1												1						46
49	26		6		5		90	4	6		23			1	52	3	11	6	9			1		11	2	3	7	2						1		1									268
50	8		2		1		54	5	4		15				22	5	4	24	11					1		1	41	4							6				1						209
51																	1										1	1																	3
52	4	1					6	1	3		6				15	1			3					2		1	1																		44
54	27	3	2		6		136	21	18		31				106	25	10	15	20		1			31	7	5	25	16							5				2			1			513
55	2	1					6	5			4				10	13			6			1		5	2		8	3		1					1										68
56									2		2				2	2	1																		1										10
57	1						13	1			3				8				2			1	1	4		1	1	2			1														39
58	3						10				2				5		1		2								2												1						26
61	7						28		3		2				8			5						2			1	2																	58
62	4				2		10	1	1		4				10	2	10	1	4					5		1	2																		57
63	3		2				16	3	6		5				21	2	2	4	8		1			3	1	1	3	2				1					1		1		1				87
64	9				1		32	2	4		12				16	1	1	2	6					3		1	4						1												96
65	10		1				31	6	2		12				15	3	2	1	9	1				7	2	2	2	3		1		1			1				1						113
66	7				2		16		1		7			1	18		5		1					4		1									1	1									65
68	2						7				1				2	1		2	2								4			1								2							24
69							3								1				1							1																			6
70	6				2		31	2	5		7		1		10			3	4		1			4			1	1							1										79
71									2		2				1		1	2									11			1															20
[illegible]	4				1		24		3		13				29			4	3					5			1									1									88
[illegible]																																													-
[illegible]	9				1		16		1		6				11				4								4	3																	55
[illegible]	13		1		2		46				8				36		2	1	6					8			5	4										1							133
[illegible]							11	1		1	1				11		2		1					2		1	1											1							33
[illegible]	9		1		1		32	5			1				28	6	1	34	6					15	3		44	1							1					1					189
[illegible]											2						1																												3
82	3	2	1		3		21	5	3		12				7	3		5	1		1				1	2	3	2											1	1					77
83	12				3	1	45	6	6		16				9	5	3	3	3					6	5	1	4	1											3	1					133
84	20		1		13		96	4	6		54		1		49	3	11	1	13		1			11		1	1	4				1							6		1				300
86	27		6		10		130	9	9		48				48	2	19	2	15							1	5	12						1	1				1		1				347
87	8		1		10		42		8		47				27	1	3	1	5					5				5						1									1		165
88							1	1			1				1			1										2																	7
89																		1																											1
90	9				3		19	3	1		10				12	2	1	3	2			1		4		1	2								1										74
91	19		1		3		96		3	1	18		1		50		4	11	12		2			20			25	5				1			2				2						276
92							1				2				3		1	1																	3										11
93	1						1		6		3				3		4	1						1			2	1							2	1									26
94	22	1	2		1		116	1	12	2	38			1	34		7	23	18	1	1			15		2	71	9																	375
95	4		1				14				3						2	4	2					2			14	2																	48
96	40				14		150	1	19		27			2	70	1	11	1	21		1			17		3	5	6				1			1			1	7				2		396
97					4		11		1		15				10			2	5		1			1			1																		51
98	7						24		1		4				11			2						2			2																		53
99	3	1	4				17	1	1		3				25	4		8	2					4		3	13	1							3										93
100	41	2	5		12		209	10	15	1	65				92	3	12	4	22					17	2	2	6	8				1							6		3		2		541
101	61	3	2		16	1	184	6	10	1	48				128	3	8	4	25		2			23			7	9		1		1		1	1	2			3						550
102	20		4		5		48	1	6		31			2	33	1	9	2	12		1			4	1		7	9			2					1		3	1						203
103							1								1			1	1								3																		7
104																																													-
105					1		2				1				2				1																										7
106	1				1		1			1	1				2			2	1							1	4	2							1										18
107	1				1		7				1				3			1	1								2																		17
108	4		1		1		14		1		2				5				1								4	1																	34
109	1				1		2	1	9		2				3		2	3								1	2	2																	27
112	3				1		4		1		3				6			1	7					2				1								1									30
113	2						2		1		3				2		1							1				1																	13
114	35		5		18		97		2		68		1		65		16	5	16					7		5	7	16											3		1		2		369
115	2		4				11	3	7						9		4	6	4		1			3			48	2																	104
116									1						1						1						2																		5
117							1				1							1	1			1																							4
118	1						5				3				1			4	3								5																		22
119							3								3			3			3						3	3																	18
120					1		1		1		2							1																		1									7
122	13				6		40		2		16				16		5	1	8								3	4																	112
126	14				8		112	1	2		35				53		2		23					17		2	6	7											4				1		287
128	1		3				13		15	1	10				16		16	6	11		2			3		2	6	3						2	1				1					1	115
TOTAL	581	17	88	1	184	2	2,397	133	375	10	848	1	5	12	1,418	117	349	312	417	31	37	7	1	334	29	75	567	207	5	7	3	9	2	14	46	13	1	8	51	4	17	1	9	2	8,746

Table 24. Site 1Gr2. Debitage in Midden Area I.

PROVENIENCE	CATEGORY																				
	Primary Decortication Flakes			Secondary Decortication Flakes					Bifacial Thinning Flakes							Other Flakes				Amorphous Flakes	Blade-like Flakes	
Unit	DC	YC	MC	DC	RC	YC	MC	OE	DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	TQ	MC	TQ	DC	TOTALS
1			1	6		1	3		7		1					1						20
2	7		2	38		3	9		·12	1		1	3			4		4	5			89
3	5	3	1	37		4	10		17		2	8	16			14		16	7	3		143
4		2	3	9		1	3		2		1	1				2						24
5	9	1	3	26	2	2	10		15		1	2	4			7		1		1		84
6	3	1	3	44		10	17		15		3	4	5	1	1	6	1	7	1		1	123
7 & 8	14	4	5	97	5	22	39	1	39	1	7	5	11	1		11		4	7		1	274
TOTAL	38	11	18	257	7	43	91	1	107	2	15	21	39	2	1	45	1	32	20	4	2	757

Table 25. Site 1Gr2. Introduced Rock in Midden Area I.

PROVENIENCE	CATEGORY												
	Firecracked/ Crazed Chert		Cracked and Irregularly Flaked Cobble/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Hematite		Limonite		Cobble-Pebble	TOTALS	
Unit	CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	WT
1	5	3		5	14							26	10	43
2	42	100	7	1	1			1	1			268	51	370
3	27	68	2	4	3							88	33	159
4	2	3										10	2	13
5	44	117	8	7	377	2	52	1	4			428	62	978
6	31	155	4	5	66	2	18			3	13	297	45	549
7 & 8	56	146	10	8	98	2	78	1	3			400	77	725
TOTAL	207	592	31	30	559	6	148	3	8	3	13	1,517	280	2,837

CT = Frequency
WT = Weight in Grams

Table 26. Site 1Gr2. Flaked Stone Tools in Midden Area I.

PROVENIENCE	CATEGORY																				
		Biface								Uniface					Cores, Use Modified, and Miscellaneous Tool Forms						
Unit	Cobble Scrapers	Heat Spall Scraper	Cobble Knife	Heat Spall Knives	Cobble/Scraper Knives	Hafted Drill	Drill Fragment	Gouge-Chisel-Wedge	Unidentifiable Biface	Cobble Scrapers	Flake Scrapers	Heat Spall Scraper	Perforator	Graver	Utilized Flakes	Utilized Cobbles	Utilized Heat Spalls	Other Knife Biface	Primary Cobble Core	Bipolar Core	TOTALS
1															1MC		1DC				2
2			1DC									1DC			4DC, 1MC	1YC	1DC		1DC		10
3		1DC		1DC						1YC					4DC	1DC	1DC				9
4															1DC						1
5					1DC	1YC			1TQ	1MC	1YC		1DC		5DC						11
6	1YC						1DC	1DC							2DC						5
7 & 8	1MC			1DC	1DC			1YC					5DC, 1MC	1DC	4DC, 2YC, 1MC		1DC	1DC		1MC	21
TOTAL	2	1	1	2	2	1	1	2	1	2	1	1	7	1	25	2	4	1	1	1	59

Table 27. Site 1Gr2. Flaked Stone Tools in Excavation Units.

PROVENIENCE		CATEGORY																																				
Levels, Zones	Unit	Hafted End Scrapers	Cobble Scrapers	Flake Scraper	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Cobble Scrapers/Knives	Hafted Drills	Other Drill	Drill Fragments	Blanks	Arrow Point Preforms	Projectile Point Preforms	Perforators	Reamers	Choppers	Unidentifiable Bifaces	Cobble Scrapers	Flake Scraper	Heat Spall Scrapers	Flake Knife	Perforators	Reamers	Gouge, Chisel, Wedges	Unidentifiable Unifaces	Utilized Flakes	Utilized Cobble	Utilized Core	Utilized Heat Spalls	Other Knives Bifaces	Microlith	Opposing Ridge Uniface Cobble	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	TOTALS
	550N460E																																					
1												1TQ		1DC		1MC			3DC					2DC				2DC, 1MC			1DC		1MC		1DC	1DC		15
2									1DC	2DC				1DC		3YC			1DC			1MC		1DC			2DC	4DC, 1MC			3DC		3DC					23
3			2DC			3DC							2DC	3DC, 1MC		1DC	1YC		3DC									14DC			3DC		1DC		1MC		1DC	36
4						1DC													1DC, 1TQ				1TQ		1DC		1DC	10DC			1DC	1DC				1DC		19
5				1TQ																												1DC						2
8																												1RC						1RC				2
	Subtotal	-	2	1	-	4	-	-	1	2	-	1	2	6	-	5	1	-	9	-	-	1	1	3	1	-	3	33	-	-	8	2	5	1	2	2	1	97
	550N360E																																					
1									1DC					1MC					1DC					1DC				1DC										5
2			2DC, 1MC									1YC	1DC		1DC	1TQ		1MC	4DC									2DC				1DC			1YC			16
3																	1MC		1MC												1DC		1DC					4
7		1TQ																		1RC																		2
8																			1RC	1RC																		2
	Subtotal	1	3	-	-	-	-	-	1	-	-	1	1	1	1	1	1	1	7	2	-	-	-	1	-	-	-	3	-	-	1	1	1	-	1	-	-	29
	550N320E																																					
1							1TQ		1RC			3TQ	1DC						1MC		1MC							1DC, 1MC										10
2		1DC				1RC	1MC			1TQ		1MC							1YC, 1TQ									3DC										10
3																																						-
4																					1YC							1DC, 1YC										3
5									1DC																				1YC									2
	Subtotal	1	-	-	-	1	2	-	2	1	-	4	1	-	-	-	-	-	3	-	2	-	-	-	-	-	-	7	1	-	-	-	-	-	-	-	-	25
	540N460E																																					
A			1MC														1MC		1DC	1MC								3DC										7
B			1MC													1DC			1DC					2DC				2DC, 1MC										8
.5-1.0						1DC								1DC					1DC									3YC			2DC							8
1.0-1.2					2DC			1DC		1DC		1DC		1DC					4DC, 1TQ			1DC				1YC		13DC, 2MC										29
1.2-1.4							1DC									1DC			1MC													1MC						4
1.4-1.6									1RC																			1YC				1YC						3
1.8-2.0																1MC																						1
2.0-2.2																			1TQ																			1
2.6-2.?																															1DC							1
3.4-3.6																												1YC										1
3.6-3.8																		1YC																				1
3.8-4.0																												1MC										1
	Subtotal	-	2	-	2	1	1	1	1	1	-	1	-	2	-	3	1	1	10	1	-	1	-	2	-	1	-	27	-	-	3	2	-	-	-	-	-	64
	660N340E																																					
1			2DC								1DC								1FC												1DC							5
2							1DC												2DC									2DC									1DC	6
3			1YC		1DC	1RC			2RC			1OE, 2YC, 1DC	1MC	2RC					1YC												1DC				1MC			15
7							1MC		1YC																							1MQ			1DC, 1YC	1YC		6
8																				1MC																		1
	Subtotal	-	3	-	1	1	2	-	3	-	1	4	1	2	-	-	-	-	4	1	-	-	-	-	-	-	-	2	-	-	2	1	-	-	3	1	1	33
	790N360E																																					
1																												1DC										1
2			1RC			1DC				1YC									1DC							1YC		1DC, 1RC, 1MC				1DC, 1RC						10
3																								1TQ														1
4			2YC									1TQ												1YC						1YC								5
5												1TQ							1YC, 1TQ																1MC			4
6						1Y?													1DC, 1RC, 1TQ	3YC, 1MQ															1RC, 2YC			11
7												1TQ																							1MC			2
	Subtotal	-	3	-	-	2	-	-	-	1	-	3	-	-	-	-	-	-	6	4	-	-	-	2	-	1	-	4	-	1	-	2	-	-	5	-	-	34
	TOTAL	2	13	1	3	9	5	1	8	5	1	14	5	11	1	9	3	2	39	8	2	2	1	8	1	2	3	76	1	1	15	8	6	1	1	3	2	202

Table 28. Site 1Gr2. Flaked Stone Tools in Features.

PROVENIENCE | CATEGORY

Feature	Cobble Scrapers	Flake Scrapers	Heat Spall Scraper	Cobble Knives	Flake Knives	Heat Spall Knife	Cobble/ Scraper/Knives	Hafted Drills	Other Drills	Drill Fragments	Blanks	Arrow Point Preforms	Perforators	Reamers	Gouge-Chisel-Wedge	Adze	Unidentifiable Biface	Cobble Scrapers	Flake Scraper	Heat Spall Scrapers	Perforator	Utilized Flake	Utilized Blade	Utilized Heat Spalls	Other Knives-Biface	Other Scraper Biface	Microlith	Primary Cobble Cores	Secondary Cobble Core	Secondary Heat Spall Core	Bipolar Core	TOTALS
25																	2TQ															
27				1YC	1FC																											
29																		1MC														
38														1FC											1RC							
40								2TQ																								2
41																	1DC				1DC	1DC						1DC				4
42																		1YC								1RC			1MC			3
43							1MQ																					1YC				2
44																									1DC			1YC				2
45										1TQ				1TQ																		2
46				1MC						1DC,1RC						1RC					1DC	1YC										6
46A																						3YC	1CC								1YC	5
46B														1DC,1TQ			1DC,1RC															4
48																	1MC				1DC											2
49				1DC	1DC,4TQ				1DC	1DC							2DC,1MC							1DC								12
50				2DC				1DC		1DC,3YC		1DC	1MC								1MC											10
51				2DC													1DC									1DC						4
54				1DC,2MC			1DC										5DC			1DC					1MC							11
55				1DC			1DC													1MC	1MC											4
57			1DC										1DC	1DC																		3
63				1YC													2DC,1MC											1MC				5
64																									1MC	1DC						2
65	1DC			1DC													1DC															3
66												1MC					2DC															3
68																									1DC							1
70																	1DC				1DC	1DC										3
71																					1YC											1
75							1DC																									1
78	1DC								1DC		1MC			1MC			1DC															5
80							2DC																									2
82																								1DC								1
83				1MC								1DC					2DC															4
84												1DC					1DC	2DC							2DC		1YC,1MC					8
86																	1DC	1MC									1MC	1MC				4
87						1DC		1RC												1DC							1DC,1YC,1MC					6
88																						1YC										1
91				1MC															1DC	1MC												3
93		1TQ																														1
94																	1DC,1TQ,1MC										1MC	1DC				5
95																					1YC											1
96														1FC			1DC			1MC								1DC				4
99																						1DC			1DC							2
100	1YC												1DC		1MC		2DC			2DC	1DC,1MC						1DC,1MC					11
101				1DC	1MC		1DC				2RC						1DC				4DC,1MC											11
102		1YC							1MC											1DC		3DC										6
108																														1DC		1
109																												1MC				1
112																	1YC															1
114	1MC														1YC			2YC				2DC										6
118																						1RC										1
122																								2DC				1MC				3
126	1DC			3DC								1DC		1DC			2DC,1MC															9
128																						3DC,1MC										4
TOTAL	5	2	1	19	7	1	7	4	3	8	3	5	3	8	2	1	38	7	1	8	15	18	1	4	8	3	9	9	1	1	1	203

Table 29. Site 1Gr2. Debitage in Burials.

PROVENIENCE	CATEGORY																						
	Primary Decortication Flakes					Secondary Decortication Flakes				Bifacial Thinning Flakes				Other Flakes				Amorphous Flakes		Blade-like Flakes			
Burial	DC	RC	YC	MC	OQ-MQ	DC	RC	YC	MC	DC	YC	TQ	MC	DC	YC	TQ	MC	DC	MC	DC	YC	MC	TOTALS
Burial 5	2					9		3	2	6	1	2	2	3	3								33
Burial 6						3			1	3													7
Burial 7									1														1
Burial 8	2		1			5		4	2	2					1								17
Burial 9	2					5			7	6	2			1									23
Burial 9A								1	1														2
Burial 10						7	1		1	3	1	1		1	1		1		1				18
Burial 11	3		2			18		2	6	8	3	2	1	3		3							51
Burial 14	3		1			4		1	2			1		1							1		14
Burial 15	13	2	2			72		4	8	42		11	4	11	2	17	6	1	1			1	197
Burial 16	7		1	1		12		4	1	6				2		1	2			1			38
Burial 17	2					7		1	3	3				1			1						18
Burial 20	3		2	5		17		3	3	11	2	6	8	2	1	7	2						72
Burial 25	22		1	4	1	106		3	19	62	1		10	14	1	1	4			2			251
TOTAL	59	2	10	10	1	265	1	26	57	152	10	23	25	39	9	29	16	1	2	3	1	1	742

Table 30. Site 1Gr2. Introduced Rock in Burials.

PROVENIENCE	CATEGORY											
	Firecracked/ Crazed Chert		Cracked and Irreg. Flaked Cobble/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Cobble-Pebble	Limestone		TOTALS	
Burial	CT	WT	CT	CT	WT	CT	WT	WT	CT	WT	CT	WT
Burial 5	10	9	1	1	1			19			12	29
Burial 6	11			1	1						12	1
Burial 7	1	4									1	4
Burial 8	6	2						30			6	32
Burial 9	7	8	2	2	34			62	9	368	20	472
Burial 10	8	65	3			1	15	43			12	123
Burial 11	18	33	1					70			19	103
Burial 14	11	14	1					59			12	73
Burial 15	80	133		5	42	7	27	150			92	352
Burial 16	65	62	3			1	178	6			69	246
Burial 17	16	21		1	8	1	1	10			18	40
Burial 10	46	43	3	9	220	5	21	155			63	439
Burial 25	95	123	2	4	17			328	1	80	102	548
TOTAL	374	517	16	23	323	15	242	932	10	448	438	2,462

CT = Frequency
WT = Weight in Grams

Table 31. Site 1Gr2. Flaked Stone and Ground Stone Tools in Burials.

PROVENIENCE	CATEGORY																	
Burial	Cobble Knife	Cobble Scraper/Knife	Hafted Drills	Drill Fragment	Arrow Point Preforms	Reamer	Unidentifiable Bifaces	Perforator	Utilized Flakes	Utilized Blade	Utilized Heat Spalls	Microliths	Opposing Ridge Uniface Cobble	Primary Cobble Core	Secondary Cobble Core	Hammerstone	Muller	TOTALS
6		1DC																1
9				1MC														1
11	1MC						1DC		1DC	1DC								4
14							1DC		2DC									3
15					1DC	1YC			2DC		1DC				1MC			6
16					2DC													2
17			1DC									1DC						2
20							1DC,1MC		1YC,1MC		1DC	1DC,1YC,1MC					1SS	9
25			1YC				1DC	1YC	3DC		1DC							7
26													1YC	1YC		1Q		3
TOTAL	1	1	2	1	3	1	5	1	10	1	3	4	1	1	1	1	1	38

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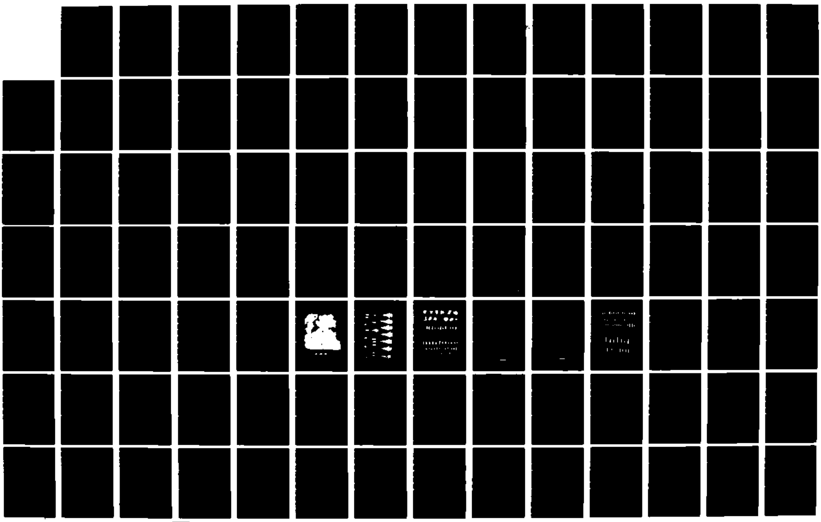

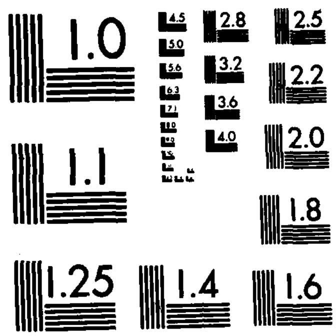

MICROCOPY RESOLUTION TEST CHART
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Table 32. Site 1Gr2. Ground Stone Tools in Excavation Units.

PROVENIENCE Unit	Hammerstones	Anvil Stones	Mullers	Metates	Combination Pitted Stone/ Muller	Abraders	Celt-Celt Fragments	Discoidal	Unidentifiable Groundstone	Sandstone Bowl Fragments	TOTALS
550N460E											
2	2Q	1SS		2SS	2SS	2SS		1CK			10
4						1CK					1
5										4SS	4
7		1SS									1
Subtotal	2	2	-	2	2	3	-	1	-	4	16
540N460E											
Zone A						1SS					1
Zone B	2Q						2SI				4
1.0-1.2						1CK					1
1.2-1.4			1SS								1
2.2-2.4									1SS		1
2.6-2.8				1CK		1SS					2
Subtotal	2	-	1	1	-	3	2	-	1	-	10
660N340											
1 Subtotal						1SS					1
790N360E											
2			2SS								2
3				1SS							1
Subtotal	-	-	2	1	-	-	-	-	-	-	3
TOTAL	4	2	3	4	2	7	2	1	1	4	30

Table 33. Site 1Gr2. Ground Stone Tools in Features.

PROVENIENCE	CATEGORY								
Feature	Hammerstone	Anvil Stone	Mullers	Metate	Pitted Stone	Abrader	Unidentifiable Ground Stone	Atlatl Weight	TOTALS
40			1Q						1
46	1Q								1
46A						1SS			1
48			1SS						1
49	1Q								1
57		1Q							1
62							1SS		1
70			1Q		1SS				2
75			1SS						1
80								1SS	1
99				1SS					1
101							1SS		1
TOTAL	2	1	4	1	1	1	2	1	13

C. 1Gr50

Flaked and ground stone tools were recovered from the surface, excavation units and features at 1Gr50. Few tools were found, so little can be said of the associated technology. Yet we may posit at least three occupations of the site. A late Archaic, Wade, component was identified from the discovery of the three Motley var. Unspecified points. The Lanceolate Expanded Haft cluster was represented by two points, the Tapered Shoulder cluster was represented by another two points and the Morrow Mountain-White Springs cluster was represented by one example.

Several Class 167 fragments were recovered from some of the lower levels. One was beveled and serrated; this may suggest early Archaic components.

Four triangular arrow points of the Late Woodland-Mississippian Triangular cluster were recovered and suggest a Miller III component.

Lithic remains were recovered from the surface and the features, but most of the artifacts were recovered from the test units.

Introduced Rock. A collection (1,348 pieces) of introduced rock weighing 15,227 g was recovered. Most were cobble-pebbles (11,134 g) and fire cracked chert (1,732 g). Most of the fire cracked chert came from Levels 1 through 3. These levels represent the Gulf Formational, Miller II and Miller III occupations.

Debitage. A collection of 1,796 flakes was recovered. The various kinds of raw material seem to have been distributed differently through the midden (Fig. 53). The material in Levels 1 and 2 seems to be different from that in Levels 4 and 5. Level 3 is mixed and yet it is this level in which a high incidence of non-local lithic materials occur: steatite, exotic cherts and Tallahatta Quartzite.

The proportion of primary, secondary, bifacial thinning, other, amorphous and blade-like flakes was calculated for Levels 1, 2, 4, 5, 6 and 7. Primary decortication flakes were 10.3 percent of the flakes in Levels 1 and 2, while secondary decortication flakes made up 48.8 percent. Bifacial thinning flakes were 22.5 percent. Other flakes were 17.5 percent, while amorphous and blade-like flakes accounted for less than 1 percent. For Levels 4 through 7, the breakdown by debitage categories was as follows: primary decortication flakes, 17.3 percent of the total; secondary decortication flakes, 40.9 percent; bifacial thinning flakes, 17.6 percent; other flakes, 20.8 percent; amorphous and blade-like, 3 percent.

Primary and secondary decortication flakes were of dark red chert in Woodland proveniences and yellow chert in Archaic contexts. Primary decortication flakes have a higher frequency in Archaic levels than they do in Woodland proveniences. The proportion of bifacial and other flakes made of Tallahatta Quartzite was somewhat higher in the Woodland levels than the Archaic ones.

Manufacture and Use Modified Flaked Stone. Forty-four flaked stone

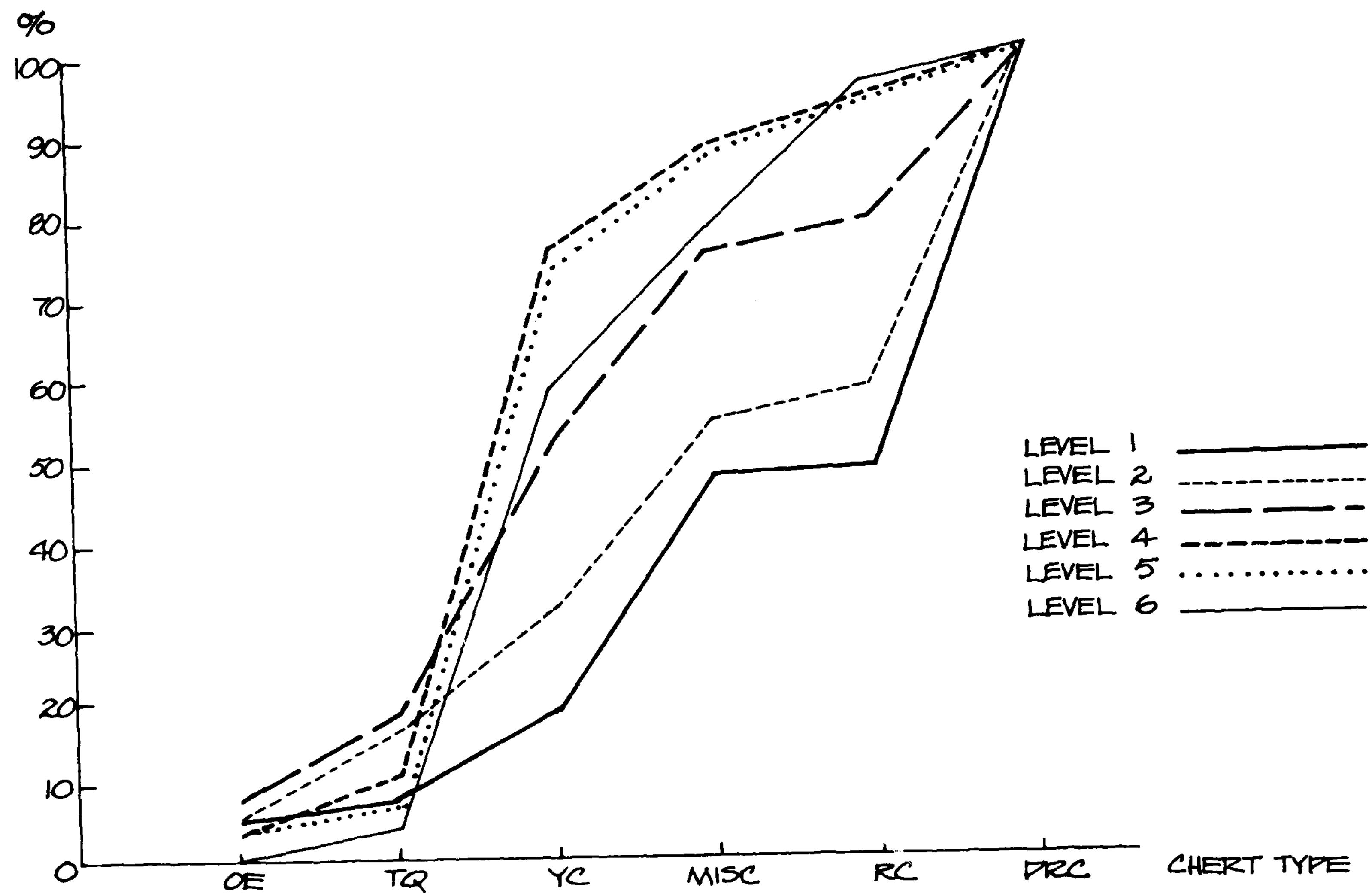

Figure 53. Site 1Gr50, Cumulative Percentage Graph by Level and Chert Type.

tools were recovered. These were scrapers, a scraper/knife, hafted drill, drill fragment, choppers, unidentifiable bifaces and unifaces, a perforator, a reamer, utilized flakes, multiple direction right angle uniface cobbles, primary cobble cores, secondary cobble cores, bipolar cores and splintered wedges.

Flaked stone tools were scarce in the upper Woodland strata. Most of these were made from local thermally altered chert.

In the lower Archaic levels (4 through 7), natural cobble core tools were produced by bipolar flaking.

Projectile Points. Twelve projectile points, whole and fragmented, were recovered: two were Tombigbee Stemmed var. Tombigbee; two were of the Expanded Haft Cluster; and three made from Ft. Payne chert were Motley var. Unspecified. The rest were all fragments. A Class 128 (White Springs var. White Springs) was also recovered suggesting otherwise unidentified Middle Archaic occupation.

Four arrow points were recovered: a Class 1 Madison var. Gainesville and a Class 4 Hamilton var. Gainesville were identified; two others were fragments.

Groundstone. Forty-one ground stone artifacts were recovered. Twenty-six were sandstone bowl fragments, recovered from Level 2 in Unit 110L40. A steatite bowl fragment was found in Level 3 of that unit. Other ground stone tools were in Levels 3 through 5 and included of a hammerstone, four mullers, a metate, four pitted stones and four pieces of unidentifiable ground stone.

Features. No flaked stone tools were recovered from the features. The only ground stone tools recovered were two sandstone mullers, from Features 4 and 6, respectively.

Table 34. *Site 1Gr50. Distribution of Projectile Points and Arrow Points.*

	Class										
Provenience	1	4	37	49	55	58	74	166	167	168	Total
60R10											
Level 2									1		1
110L40											
Level 1										1	1
290L40											
Level 2				1							1
355R5											
Level 2									1		1
Level 4								1	1		2
410L45											
Level 2										1	1
460R45											
Level 1		1									1
Level 2									1		1
Surface	1		1		1	1	3				7
Total	1	1	1	1	1	1	3	1	4	2	16

Table 35. Site 1Gr50. Introduced Rock in Excavation Units.

PROVENIENCE		CATEGORY																			
Level	Unit	Firecracked/ Crazed Chert		Cracked and Irreg. Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Hematite		Limonite		Cobble-Pebble	Petrified Wood		Steatite		Limestone		TOTALS	
		CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	WT	CT	WT	CT	WT	CT	WT
	215R30																				
1		10	15		3	92							87							13	194
2		12	33	1	6	40			4	3			173							23	249
3		20	71	1	5	19							101	1	1					27	192
4		4	18		1	20							34							5	72
5		6	4	1	1	1							56							8	61
6		1	1										51							1	52
7		1	1										47							1	48
	Subtotal	54	143	3	16	172	-	-	4	3	-	-	549	1	1	-	-	-	-	78	868
	290L40																				
1		11	9	3	4	8			1	1	3	1	121							22	140
2		9	6	4	5	318			1	2.0			162	2	33					21	521
3		6	3	1	6	51			8	10			248							23	312
4		5	27	2	6	9			3	10			74	1	1					17	121
5		9	11						2	1	8	236	152							19	400
6													48							-	48
7													18							-	18
	Subtotal	40	56	12	21	386	-	-	15	24	11	237	823	3	34	-	-	-	-	102	1,560
	320R70																				
1		3	6	1	1	1							50							5	57
2		16	23	5	2	7					1	1	676	2	5					26	712
3		39	119	5	5	8							319							49	446
4		12	37	4	4	70							17							20	124
5		5	2	2					1	1			105							8	108
6		1	1										37							1	38
7				4									230							4	230
	Subtotal	76	188	21	12	86	-	-	1	1	1	1	1,434	2	5	-	-	-	-	113	1,715
	355R5																				
1		20	100	-	7	31					1	6	132							28	269
2		25	65	4	16	27	3	1	4	1	3	2	17							59	113
3		24	29	3	7	48			4	2			227							38	306
4		17	14	8	9	22					1	1	247							34	284
5		2	1	3	1	1							84							6	86
6				3			1	1					23							4	24
7													25							-	25
	Subtotal	92	209	21	39	129	4	2	8	3	5	9	755	-	-	-	-	-	-	169	1,107
	410L45																				
1		20	12	2	5	5			10	2			190							37	209
2		33	33	10	6	7			2	1	2	1	427							53	469
3		80	174	14	32	344	2	3	9	7	2	1	997	5	5	4	20			148	1,551
4		28	93	1	2	1	1	1					120							32	215
5		11	50		5	27							58	1	1					17	136
6		10	20	4	4	13			1	1	1	1	134							20	169
7		5	5		3	4							50							8	59
	Subtotal	187	387	31	57	401	3	4	22	11	5	3	1,976	6	6	4	20	-	-	315	2,808
	460R45																				
1		20	16	1	9	3							42							30	61
2		26	50	2	7	4	2	3			1	1	130	1	6					39	194
3		30	89	3	4	28							299							37	416
4		21	67	4	7	62			1	0.4			85	1	0.5					34	214.9
5		11	8	3	3	1					1	1	112	1	1					19	123
6		6	12	6	7	50							63							19	125
7				2									17							2	17
	Subtotal	114	242	21	37	148	2	3	1	0.4	2	2	748	3	7.5	-	-	-	-	180	1,150.9
	445L25																				
1		19	15	4	3	3							73							26	91
2		31	50	2	6	47			1	1			748					3	2	43	848
3		12	40	1	6	93			1	1	1	1	189							21	324
4		20	23	5	23	29			6	1			534	1	1					55	588
5		7	19	2	10	13			3	1			200							22	233
6		4	3		5	8			2	1			121							11	133
7		2	1		1	1							37							3	39
8													9							-	9
9 & 10				2									743							2	743
10													361							-	361
	Subtotal	95	151	16	54	194	-	-	13	5	1	1	3,015	1	1	-	-	3	2	183	3,369
	110L40																				
1		9	8	2	3	2							88							14	98
2		26	264	9	11	87			10	21			639							56	1,011
3		11	23	4	7	122	1	1	4	5	4	10	226			5	65			36	452
4		6	3	3	1	1	1	1	1	15	4	9	109							16	138
5		7	5		3	76			15	11			128							25	220
6													8							-	8
	Subtotal	59	303	18	25	288	2	2	30	52	8	19	1,198	-	-	5	65	-	-	147	1,927
	60R10																				
1		5	2		4	11			2	1			203	1	11					12	228
2		20	39	5	2	1			2	1			242	1	2					30	285
3		6	10	1					1	6			27							8	43
4		3	1	2									9							5	10
5				3									59							3	59
6				2									66							2	66
7		1	1										30							1	31
	Subtotal	35	53	13	6	12	-	-	5	8	-	-	636	2	13	-	-	-	-	61	722
	TOTAL	752	1,732	156	267	1,816	11	11	99	107.4	33	272	11,134	18	67.5	9	85	3	2	1,348	15,226.9

Table 36. Site 1Gr50. Debitage in Excavation Units.

PROVENIENCE / CATEGORY

Level	Unit	Primary Decortication Flakes									Secondary Decortication Flakes								
		DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ
	215R30																		
1		1									6		1		3				
2		1									6	4	2		8				
3		1		1							4		4		3				
4			1	2									1		1				
5		1									2		3						
6				1											1				
7											1								
Subtotal		4	1	5	-	-	-	-	-	-	19	4	11	-	16	-	-	-	-
	290L40																		
1		2									6				4				
2		4	1			2		1			10		7		14				
3						1					3				5				1
4			1	1		1				1	1	1	1		8				
5				1								1	7		6				
6													4		1				
7													2						
Subtotal		6	2	2	-	4	-	1	-	1	20	2	21	-	38	-	-	-	1
	320R70																		
1		1									1		1		1				
2											3		1	1	2				
3						1							4		1				
4				2									8						
5		1											1		4				
6																			
7																			
Subtotal		2	-	2	-	1	-	-	-	-	5	-	15	1	8	-	-	-	-
	1[illegible]5R5																		
1				1							10		[illegible]		[illegible]				
2		[illegible]		1							16	1	7		2				
3		[illegible]		11							2	2	20		4				
4				47		[illegible]				1	3	5	104		3				
5			1	19									21		1				
6											1								
7		1																	
Subtotal		10	1	74	-	4	-	-	-	-	32	8	154	-	17	-	-	-	-
	410L65																		
1		[illegible]		1							7		1		6				
2		[illegible]		1		1					10		2		2				
3				2		2					12		7		8				
4		1		1							1		1						
5		1		1		1					2	1	4		5				1
6		1	2	2		2					1	1	5		3				
7													2		1				2
Subtotal		11	2	8	-	6	-	-	-	-	33	2	22	-	25	-	-	-	3
	[illegible]60R65																		
1						1					6		2		2				
2		2				3					3		3		5				
3		1	1	1		1					1	1	6		2				
4		[illegible]		2		1				1	4		13		2				
5				[illegible]				1					9		3				1
6												2	8		1				
7																			
Subtotal		5	1	5	-	6	-	1	-	1	14	3	41	-	15	-	-	-	1
	445L25																		
1		2						1			8		2		5				
2		1		1		4					9	5	4						
3				2							3		3		1				
4		1		19		1					4	6			9				3
5				6						1	4	2	14						
6		1	2	[illegible]		1						4	12		6				
7				2								2			1				
8				1															
9				1											2				
10				1															
Subtotal		5	2	35	-	6	-	1	-	1	28	19	35	-	26	-	-	-	3
	110L40																		
1		2		1							8	1	1				1		
2		1		3		1					5		1		3		1		1
3		1		2							1	2	1		2				
4				2							1	1	9		1				
5			1	8								3	17		1				1
6				1															
Subtotal		-	1	17	-	1	-	-	-	-	15	7	28	-	7	-	2	-	2
	60R10																		
1											3								
2										1	5		1						8
3															1				1
4													1						
5																			
6																			
7												1							
Subtotal		-	-	-	-	-	-	-	-	1	8	1	2	-	1	-	-	-	9
Total		67	10	151	-	28	-	3	-	5	173	46	329	1	151	-	2	-	19

Level	Unit	DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ
		Bifacial Thinning Flakes									Other Flakes								
	215R30																		
1		3		1	2	1					1								
2		4			1	2					3			2	2				
3		1			1	1					3				2				
4				2		2							1						
5		1	1										3		2				
6															1				
7																			
Subtotal		9	1	3	4	6	-	-	-	-	7	-	4	2	7	-	-	-	-
	290L40																		
1		4		1		3							1	1	3				
2		3		6	2	10		1			3		2	3	7				
3					3	5								6	1				
4			2	1				1	1			3	1	3	1				
5		1	1	3		1							2	4	2				
6														1					
7								1											
Subtotal		8	3	11	5	19	-	3	1	-	3	3	6	18	14	-	-	-	-
	320R70																		
1																			
2				1		1					1				2			1	
3				2		3							1	1	1				
4			2	1									6						
5												1	3						
6																			
7						1	1												
Subtotal		-	2	6	-	5	-	-	-	-	1	1	10	1	1	-	-	1	-
	1[illegible]5R5																		
1		5	1	1		1			2		3			2	2				
2		5		2	5	3		1			2			12	2		1	3	
3		2	1	6	3	5			3		3		4	19	4				
4		1		31	1	4						4	35		5				
5				20		1							18						
6				1									1		1				
7																			
Subtotal		13	2	63	9	14	-	3	5	-	8	4	58	33	14	-	1	3	-
	410L65																		
1		4				3					1				4			1	
2		1									1			3	1				
3		1	2	1	5	4		2	3					65					
4		1			1								1	7					
5		1		3				1						3	3				
6		1		1									1						
7		1		1		1							1		1				1
Subtotal		10	2	6	6	8	-	3	3	-	2	-	3	78	9	-	-	1	1
	[illegible]60R65																		
1		3				2					1		1						
2		8									1			1	1				
3		6		3	4							1	2	9	1				
4		3		3	2	1			1		1		3	4					
5				4									2				1		
6			1	1									4	1	1				
7					1						1								
Subtotal		18	1	11	7	3	-	-	1	-	4	1	12	15	3	-	1		
	445L25																		
1		1		1		1					2				2				
2		3				1		2	1	1	4			2	3				
3		2			1			3							2				
4				5	2	6		3	2		2	1	4	9	6				
5		3	2	4		3					3	4	2	1	2				
6			5	8	1	3					2	2	5		2				
7						1													
8																			
9																			
10																			
Subtotal		9	7	18	4	15	-	8	3	1	13	7	11	12	17	-	1	-	-
	110L40																		
1			1	1		1		2									1		
2		3		1		1		5			1		1	1			3		
3				1				3	2		1		1	2			1		
4		1		3		1							1	1	1		1		
5				2	1			1				2	5						
6				1									1						
Subtotal		4	1	6	1	3	-	11	2	-	2	2	9	4	1	-	6	-	-
	60R10																		
1		1																	
2		1				1		1	2										2
3						1							1						
4																			
5																			
6													1						
7																			
Subtotal		2	-	-	-	2	-	1	2	-	-	-	2	-	-	-	-	-	2
Total		72	19	122	36	75	-	29	17	1	40	5	115	163	68	-	9	5	3

Level	Unit	Amorphous Flakes									Blade-like Flakes									TOTALS
		DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	AG	OE	FC-BC	OQ-MQ	
	215R30																			
1																				19
2																				35
3																				21
4																				10
5																				13
6																				3
7																				1
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105
	290L40																			
1																				25
2																				76
3																				25
4			1																	29
5						1									1					31
6																				6
7																				3
Subtotal		-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	195
	320R70																			
1																				4
2										1										14
3													1							15
4				1																[illegible]
5				1																11
6																				-
7																				1
Subtotal		-	-	4	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	67
	1[illegible]5R5																			
1																				34
2																				70
3													1							91
4				2									1							[illegible]
5				1									1							83
6																				4
7																				1
Subtotal		-	-	3	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	513
	410L65																			
1																				33
2																				23
3						1														115
4																				16
5																				27
6																				20
7																				11
Subtotal		-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	[illegible]
	[illegible]60R65																			
1																				18
2																				28
3																				38
4																				43
5				2																25
6																				19
7																				2
Subtotal				2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171
	445L25																			
1																				25
2																				41
3																				19
4		1		1	1	1									1					88
5				1																50
6																				59
7						2														[illegible]
8																				1
9																				1
10																				1
Subtotal		1	-	2	1	3	-	-	-	-	-	-	-	-	1	-	-	-	-	293
	110L40																			
1																				20
2						1							1							34
3																				19
4																				20
5				1									2							45
6																				3
Subtotal		-	-	1	-	1	-	-	-	-	-	-	3	-	-	-	-	-	-	151
	60R10																			
1																				4
2						1				1										26
3																				[illegible]
4																				1
5																				-
6																				1
7																				1
Subtotal		-	-	-	-	1	-	-	-	3	-	-	-	-	-	-	-	-	-	17
Total		1	1	12	1	7	-	-	-	3	1	-	9	-	2	-	-	-	1	1,796

Table 37. Site 1Gr50. Introduced Rock in Features.

PROVENIENCE	CATEGORY													
	Firecracked/ Crazed Chert		Cracked and Irregularly Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Hematite		Limonite		Cobble-Pebble	Siltstone		TOTALS	
Feature	CT	WT	CT	CT	WT	CT	WT	CT	WT	WT	CT	WT	CT	WT
2	44	95		4	138			1	1	514	1	1	50	749
3	3	41				1	1			25	10	5	14	72
4	24	43	1			3	1	2	1	110			30	155
5	1	3	3	1	2	4	10			29			9	44
6			1							12			1	12
7	10	26	3	10	182	1	1			72			24	281
TOTAL	82	208	8	15	322	9	13	3	2	762	11	6	128	1,313

Table 38. Site 1Gr50. Debitage from Features.

PROVENIENCE	CATEGORY																
	Primary Decortication Flakes			Secondary Decortication Flakes			Bifacial Thinning Flakes					Other Flakes					
Feature	YC	MC	OQ-MQ	DC	YC	MC	DC	YC	TQ	MC	OE	DC	YC	TQ	MC	OE	TOTALS
2				1	2				1	1		1	1		2		9
3					2							1		1			4
4	1			2	3	1		1	1		2			5	2	2	20
5					1	2	1		1	2	1				2		10
6														3			3
7		1	1		1			1		2			1	1			8
TOTAL	1	1	1	3	9	3	1	2	3	5	3	2	2	10	6	2	54

Table 39. Site 1Gr50. Flaked Stone in Excavation Units.

PROVENIENCE		CATEGORY																	
Level	Unit	Flake Scraper	Heat Spall Scraper	Cobble Scraper/Knife	Hafted Drill	Drill Fragment	Chopper	Unidentifiable Bifaces	Cobble Scrapers	Flake Scraper	Perforator	Reamer	Chopper	Unidentifiable Uniface	Utilized Flakes	Opposing Ridge Uniface Cobble	Primary 'le Cores	? polar Core	TOTALS
	410L45																		
1					1DC														1
3								1TQ					1MC						2
6																1RC			1
	Subtotal	-	-	-	1	-	-	1	-	-	-	-	1	-	-	1			4
	355R5																		
2																2RC	1YC		3
3									1YC										1
4								1RC							1YC				2
5																1YC			1
	Subtotal	-	-	-	-	-	-	1	1	-	-	-	-	-	1	3	1	-	7
	110L40																		
1																	1MC		1
3							1RC												1
	Subtotal	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	2
	460R45																		
3						1CC								1YC			1YC		3
4								1YC											1
5								1MC							1YC			1YC	3
	Subtotal	-	-	-	-	1	-	2	-	-	-	-	-	1	1	-	1	1	7
	445L25																		
3								1TQ											1
4									1YC			1YC							2
5								1DC		1TQ									2
	Subtotal	-	-	-	-	-	-	2	1	1	-	1	-	-	-	-	-	-	5
	215R30																		
1		-	-	1DC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	290L40																		
1								1DC											1
2			1DC																1
3		1RC																	1
5								1MC											1
	Subtotal	1	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	4
	320L70																		
3	Subtotal	-	-	-	-	-	-	-	-	-	1DC	-	-	-	-	-	-	-	1
	TOTAL	1	1	1	1	1	1	8	2	1	1	1	1	1	2	4	3	1	31

Table 40. Site 1Gr50. Ground Stone Tools in Excavation Units and Features.

PROVENIENCE	CATEGORY							
Unit	Hammerstone	Mullers	Metate	Pitted Stones	Unidentifiable Ground Stone	Sandstone Bowl Fragments	Steatite Bowl Fragments	TOTALS
110L40								
2					1Q	26SS		27
3		1Q		1SS	1SS		1	4
290L40								
5			1SS		1SS			2
445L25								
4				1SS				1
5				1SS				1
410L45								
3	-	1SS	-	-	-	-	-	1
60R10								
4	-	-	-	1SS	-	-	-	1
355R5								
1					1SS			1
3	1Q							1
Feature 4		1SS						1
Feature 6		1SS						1
TOTAL	1	4	1	4	4	26	1	41

SS = Sandstone
Q = Quartzite

D. 1Pi61

Lithic materials were recovered from a variety of archaeological contexts at 1Pi61. Features were associated with the Turkey Paw subphase, the Vienna subphase, and the Catfish Bend-Gainesville subphase. Preceramic components occur and the site was occupied at least four different times during the Archaic: a Late Archaic (West Greene) occupation and a Middle Archaic (Vaughn) occupation, as well as occupations by people producing Benton cluster projectiles and Kirk cluster forms are suggested. It is possible that a preceramic (Wade) occupation was present. The Late Woodland-Mississippian Triangular cluster was evident. The various occupations caused much mixing of components as would be expected at a heavily occupied site over a long period of time. We are, nevertheless, able to determine some discrete proveniences.

Late Miller II, Feature Cluster I

Eight Turkey Paw subphase pits were located near the terrace edge. Some intrusive contents are evident, but not enough to disturb us.

Features 14, 15, 18, 58, 69, 84, 126 and 184 were located in close proximity to each other and the lithics in them were considered part of the Late Miller II Turkey Paw subphase.

Fire Cracked Chert. Thermal alteration/reduction of chert resulted in numerous thermal spalls and heat crazed cobbles recovered from these features. Seven hundred fifty-four pieces weighing 2,119 g (mean wt. 2.81 g) were recovered. Features 69 and 58 contained the largest amount of fire cracked chert.

Debitage. The collection (2,861 flakes)consists of secondary decortication flakes (55.4 percent), bifacial thinning flakes (20.8 percent), other flakes (11.2 percent), primary decortication flakes (10.5 percent), and amorphous and blade-like flakes (less than 1 percent).

Manufacture and Use Modified Flaked Stone. One hundred thirty-one flaked stone tools (excluding projectile points) were recovered, including 6 scrapers, 3 blanks, 1 preform, 14 perforators, 2 gouge-chisel-wedges, 2 choppers, 19 unidentifiable bifaces or unifaces, 40 utilized flakes, 9 utilized thermal spalls and 10 cores. This assemblage is mostly bifacial; perforators (10.6 percent) are the only major uniface tool category.

Technologically, 54.9 percent of the tools were flakes, 26.4 percent were cobbles and 18.6 percent were thermal spalls.

Projectile Point. Eight projectile points were recovered. One point (Pickens var. Pickens) was intrusive into Feature 58.

Of the other points recovered, three were Tobmigbee Stemmed (one var. Turkey Paw and two var. Tombigbee). Two other points were one resembling the Alba type and one Vaughn var. Vaughn. The Vaughn var. Vaughn type is intrusive, but we cannot decide about the Alba point.

Groundstone. Twelve ground stone implements were recovered, including two hammerstones, three abraders, four pitted stones, one muller, one piece of ground hematite and an unidentifiable ground stone fragment. Feature 184 contained five of the twelve ground stone tools, including a muller, three pitted stones and a hammerstone.

Late Miller II, Feature Cluster II

Turkey Paw subphase pits were located on the eastern side of the site, some 30 to 40 ft from the pits just discussed. None of these is free of intrusive materials. Feature 27 penetrates a Late Archaic "activity area". The Late Archaic implements were partially separable from the Miller II assemblages.

Features 21, 17, 27, 80, 87 and 228 were believed to represent a portion of the Late Miller II Turkey Paw subphase.

Fire Cracked Chert. Five hundred sixty-three pieces of fire cracked chert weighing 1,509 g (mean wt. 2.68 g) were recovered.

Debitage. Two thousand, six hundred ninty-five flakes were recovered, including: 1,263 secondary decortication flakes; 657 bifacial thinning flakes; 379 other flakes; 342 primary decortication flakes; 54 amorphous and blade-like flakes.

Secondary decortication flakes were associated with the following rock types: DRC (65.7 percent); RC (1.9 percent); YC (9.4 percent); Misc. (23.0 percent). Nearly 85 percent of the chert was heat treated.

Manufacture and Use Modified Flaked Stone. One hundred sixty-three flaked stone tools (excluding projectile points) were recovered, including 7 scrapers, 9 knives, 5 drills, 1 blank, 1 preform, 17 perforators, 1 reamer, 4 gouge-chisel-wedges, 21 unidentifiable biface and uniface fragments, 69 utilized flakes, 9 utilized thermal spalls and 18 cores.

This assemblage is mostly bifacial; perforators and scrapers are unifacial. Technologically, 88 (69.8 percent) of the tools were flakes, 18 (18.2 percent) were cobbles and 15 (11.9 percent) were thermal spalls.

Projectile Points. Sixteen projectile points or fragments were recovered; two were Tombigbee Stemmed var. Turkey Paw and four were var. Tombigbee. One Class 51 Expanded Haft Cluster projectile point and a Class 64 projectile point were recovered. The other points were Gary var. Tombigbee forms, all of Tallahatta quartzite, found in Feature 27.

Groundstone. Eight ground stone artifacts were recovered, three each from Features 27 and 87 and one each from Features 21 and 228. There were two pitted pieces of sandstone, a sandstone anvil, two sandstone mullers, a sandstone metate, an abrader and a chert hammerstone.

Early Miller IIIa, Feature Cluster I

These pits were near the terrace edge on the eastern side of the site and are are slightly contaminated by earlier and later materials. Nevertheless, Features 26, 31, 46, 66, 86, 128, 142, 187 and 213 are considered Early Miller III proveniences.

Fire Cracked Chert. A collection (1,141 pieces) of fire cracked chert weighing some 2,990 g (mean wt. 2.62 g) was recovered.

Debitage. The collection (3,197 flakes) consists of 47.3 percent secondary decortication flakes, 25 percent bifacial thinning flakes, 14.2 percent other flakes, 11.4 percent primary decortication flakes, and less than 2 percent amorphous and blade-like flakes.

Secondary decortication flakes were associated with different stone types as follows: 69.8 percent Dark Red Chert; 1.7 percent Red Chert; 11.1 percent Yellow Chert; .1 percent Tallahatta Quartzite; and 17 percent Miscellaneous Chert.

Manufacture and Use Modified Flaked Stone. One hundred forty flaked stone tools (excluding projectile points) were recovered, including: scrapers (4.2 percent); knives (3.5 percent); preforms (0.7 percent); reamers (0.7 percent); gouge-chisel-wedges (3.5 percent); choppers (1.4 percent); unidentifiable bifaces and unifaces (19.9 percent); utilized flakes (42.1 percent); utilized thermal spalls (5.7 percent); and cores (11.4 percent).

Technologically, 62.1 percent were made on flakes, 25.2 percent on cobbles, and 12.6 percent on thermal spalls.

Projectile Points. Ten projectile points were recovered, including one each of the Lanceolate Spike, Tapered Shoulder and Little Bear Creek Clusters. The others are fragments. Eight arrow points were recovered, including two Pickens var. Pickens, four Madison var. Gainesville, one Class 12 and one Class 171.

Groundstone. Three pieces of ground stone were recovered, including a quartzite hammerstone, a sandstone abrader and a fragment of unidentifiable groundstone.

Early Miller IIIb, Cluster II

These pits were found near the previously discussed set of pits. These are Early Miller IIIb. There are disturbed contexts, but Features 32a, 63, 65, 71, 77 and 156 represent the Early Miller III subphase.

Fire Cracked Chert. A collection (873 pieces) of fire cracked chert weighing 2,421 g (mean wt. 2.77 g) was recovered.

Debitage. The collection (1,619 flakes) includes secondary decortication flakes (51 percent), bifacial thinning flakes (30.3 percent), pri-

mary decortication flakes (9.5 percent), other flakes (6.7 percent), and amorphous and blade-like flakes (less than 1 percent).

Manufacture and Use Modified Flaked Stone. Eighty-four flaked stone tools (excluding projectile points) were recovered, including scrapers (8.3 percent), knives (8.3 percent), knife/scrapers (2.4 percent), drills (2.4 percent), choppers (2.4 percent), unidentifiable bifaces (20.2 percent), utilized flakes (42.9 percent), utilized thermal spalls (9.5 percent) and cores (3.6 percent).

Technologically, 56.9 percent of these were made on flakes, 27.6 percent were on cobbles and 15.3 percent on thermal spalls.

Projectile Points. One point fragment was recovered and one Madison var. Gainesville form (Class 2) as well as Class 13 and Class 169 artifacts.

Groundstone. No groundstone artifacts were recovered.

Early Miller III, Feature Cluster III

Five Vienna subphase pits were located on the east-central portion of the site. Features 30, 33, 34, 36 and 203 are associated with the Vienna subphase.

Fire Cracked Chert. A collection (1,889 pieces) weighing 2,922 g (mean wt. 1.54 g) was recovered.

Debitage. The collection (1,760 flakes) includes secondary decortication flakes (48.6 percent), bifacial thinning flakes (27.3 percent), other flakes (12.4 percent), primary decortication flakes (10.6 percent), and amorphous and blade-like (less than 1 percent).

Manufacture and Use Modified Flaked Stone. Sixty-three flaked stone tools (excluding projectile points) were recovered, including scrapers (4.8 percent), knives (4.8 percent), blanks (1.6 percent), preforms (1.6 percent), perforators (3.2 percent), choppers (1.6 percent), unidentifiable bifaces (23.8 percent), utilized flakes (34.9 percent), utilized thermal spalls (17.5 percent), and cores (6.3 percent).

Technologically, these tools were made on flakes (53.3 percent), cobbles (15.5 percent) and thermal spalls (31.1 percent).

Projectile Points and Arrow Points. Thirteen projectile points were recovered: one each from the Lanceolate Expanded Haft, Flint Creek and Little Bear Creek Clusters; two Pickens var. Pickens; one each of Class 1 and Class 2 (Madison var. Gainesville) points; and one Hamilton var. Gainesville arrow point. The remainder were fragments.

Groundstone. A chert hammerstone and a sandstone abrader were recovered.

Early Miller III, Feature Cluster IV

Eleven pits were located on the northwest portion of the site near the terrace edge. Though somewhat contaminated, Features 25, 37, 54, 61, 62, 64, 120, 122, 182 and 195 represent a portion of the Vienna subphase, lithic assemblage.

Fire Cracked Chert. A collection (2,201 pieces) of fire cracked chert weighing 6,283 g (mean wt. 2.85 g) was recovered.

Debitage. The collection (5,368 flakes) includes secondary decortication flakes (52.7 percent), bifacial thinning flakes (24 percent), primary decortication flakes (12.1 percent), other flakes (8.4 percent), and amorphous and blade-like flakes (less than 3 percent).

Manufacture and Use Modified Flaked Stone. Two hundred sixty flaked stone tools were recovered including scrapers (1.5 percent), knives (8.1 percent), knife/scrapers (0.4 percent), drills (0. 8 percent), blanks (3.5 percent), preforms (2.3 percent), perforators (1.2 percent), choppers (0.8 percent), unidentifiable bifaces and unifaces (17.3 percent), utilized flakes (45.4 percent), utilized thermal spalls (8.1 percent), and cores (10.8 percent).

Technologically, 63.1 percent of these were made on flakes, 16.9 percent on cobbles, and 20 percent on thermal spalls.

Projectile Points. Forty-two projectile points were recovered, including one Class 57 (Tombigbee Stemmed var. Tombigbee) and a Class 53 point belonging to the Lanceolate Expanded Haft Cluster. More abundant were five Class 10 (Pickens var. Pickens), three Class 2 (Madison var. Gainesville), and three of the small Madison var. Gainesville and Hamilon var. Gainesville arrow points. Others represented include a Class 6, a Class 7, two Class 12, a Class 13, two Class 14 and two Class 19 points.

Groundstone. Five ground stone tools were recovered including four sandstone abraders and one pitted anvilstone.

Late Miller III, House Cluster I

These pits were located in the southwestern portion of the site. All occur near Feature 29, Structure 3, a Terminal Woodland-Early Mississippian Gainesville subphase rectangular wall-trench house. These are all somewhat contaminated in content, but we consider Features 3, 97, 98, 113, 116 and 168 to be tenuously associated and part of the Late Miller III Catfish Bend and Gainesville subphases.

Fire Cracked Chert. A collection of fire cracked chert (4,696 pieces) weighing 6,701 g (mean wt. 1.43 g) was recovered.

Debitage. The collection (4,904 flakes) includes secondary decortication flakes (51.2 percent), bifacial thinning flakes (26.9 percent), primary decortication flakes (11.4 percent), other flakes (8.8 percent), and amorphous and blade-like flakes (less than 2 percent).

Manufacture and Use Modified Flaked Stone. Two hundred eighty-seven flaked stone tools (excluding projectile points) were recovered, including: scrapers (1.7 percent); knives (5.2 percent); knife/scrapers (1.0 percent); drills (0.7 percent); blanks (0.3 percent); preforms (0.3 percent); perforators (0.7 percent); gouge-chisel-wedges (0.7 percent); chopper (0.3 percent); unidentifiable bifaces and unifaces (16.7 percent); utilized flakes (55.7 percent); utilized thermal spalls (15.3 percent) and cores (1.0 percent).

Technologically, 70.7 percent of these tools were made on flakes, 22.3 percent on thermal spalls, and 7.0 percent on cobbles.

Projectile Points. Thirty-two projectile points were recovered. These included one Lanceolate Spike Cluster form (Class 22) which resembles the Collins projectile point, one Class 109 (Middle to Late Archaic form) and two fragments.

Twenty-eight arrow points and fragments were recovered. Classes 1, 2 and 3 (Madison *var. Gainesville*).

Groundstone. Three ground stone tools were recovered: two abraders, one each from Features 166 and 97; and an unidentifiable groundstone fragment from Feature 97.

Late Miller III, Feature Cluster I

Four pits were located on the extreme southeastern portion of the excavated site area. Although they are not totally discrete contexts, we consider Features 209, 211, 212 and 214 associated with the Miller II Catfish Bend and/or Gainesville subphase.

Fire Cracked Chert. A collection (1,405 pieces) weighing 3,130 g (mean wt. 2.22 g) was recovered.

Debitage. The collection (3,661 pieces) includes secondary decortication flakes (50.9 percent), bifacial thinning flakes (26.8 percent), other flakes (10.6 percent), primary decortication flakes (9.8 percent), amorphous and blade-like flakes (less than 2 percent).

Manufacture and Use Modified Flaked Stone. One hundred forty-seven flaked stone tools (excluding projectile points) were recovered, including: scrapers (2.7 percent); knives (4.8 percent); drills (0.7 percent); preforms (2.7 percent); perforators (2.7 percent); unidentifiable bifaces and unifaces (14.3 percent); utilized flakes (64.6 percent); utilized thermal spalls (3.4 percent); cores (4.1 percent).

Technologically, of 122 tools whose blank form was determined, 81.1 percent were either used as or made on flakes, 8.2 percent were on cobbles, and 10.7 percent on thermal spalls.

Projectile Points. Twenty-nine points were recovered; one Class 80 (Wade *var. Wade*), four Class 1 (Madison *var. Gainesville*) forms, 6 Pickens

var. Pickens, one each of Class 3, 4 and 6 (Madison var. Gainesville and Hamilton var. Gainesville) forms. The rest are fragments.

Groundstone. Seven groundstone tools were recovered including three combination anvilstone/mullers, a muller and pitted stone, two sandstone pitted stones, a quartzite anvil stone and a sandstone abrader.

Late Miller III, House Cluster II

Two small rectangular Gainesville subphase semi-subterranean houses and their associated pits, Features 16, 32b, 68, 79, 83, 127, 135, 136, 137, 138, 141, 147, 155, 197 and 208, were considered associated with Gainesville and/or Catfish Bend subphases. The proveniences are relatively undisturbed.

Fire Cracked Chert. A collection of fired chert (2,888 pieces) weighing 5,243 g (mean wt. 1.81 g) was recovered.

Debitage. The collection (5,740 flakes) includes secondary decortication flakes (48 percent), bifacial thinning flakes (28 percent), other flakes (12 percent), primary decortication flakes (10 percent), and amorphous and blade-like flakes (1 percent).

Secondary decortication flakes occur in the following proportions among the various chert types: Dark Red Chert, 74.6 percent; Red Chert, 1.6 percent; Yellow Chert, 5.6 percent; Tallahatta Quartzite, 0.3 percent; and Miscellaneous Chert, 18.0 percent. Over 90 percent were thermally altered.

Manufacture and Use Modified Flaked Stone. Two hundred fifty-four flaked stone tools (excluding projectile points) were recovered including: scrapers (7.1 percent); knives (11 percent); knife/scrapers (1.2 percent); drills (1.2 percent); blanks (1.2 percent); preforms (2 percent); perforators (3.1 percent); gouge-chisel-wedges (0.4 percent); choppers (0.4 percent); unidentifiable bifaces and unifaces (11.8 percent); utilized flakes (52 percent); utilized thermal spalls (7.1 percent); and cores (less than 2 percent).

Of 210 tools whose original blank forms were determinable, 67.1 percent were either used as or made of flakes, 15.2 percent were made of cobbles, and 17.6 percent were either made of or used as thermal spalls.

Projectile Points. Two (Class 39 and 61) projectile points and 34 arrow points were recovered: 6 Pickens var. Pickens, 7 Madison var. Gainesville, 6 Hamilton var. Gainesville, and 2 Class 12 and the rest Class 13 fragments.

Groundstone. 14 ground stone tools were recovered, including 1 sandstone pitted stone, 2 sandstone abraders, 2 sandstone mullers, an anvil, a sandstone saw, a pitted stone and unidentifiable pieces of ground stone.

Lithic Artifacts From Other Proveniences

Excavation Units. Lithics were recovered from a variety of other proveniences. These include the surface, test units, and other features such as pits, post holes and burials. Only the lithics from the test units are described here. The midden was generally confined to two levels which contained Miller II and Miller III artifacts. Archaic artifacts intruded into the clay subsoil beneath the midden. Stratigraphic separation of the Archaic and Woodland artifacts was difficult.

Fire Cracked Chert. A collection (10,034 pieces) weighing 17,268 g (mean wt. 1.72 g) was recovered.

Debitage. A large collection (14,908 flakes) was recovered.

Manufacture and Use Modified Flaked Stone Tools. Nine hundred sixty flaked stone artifacts (excluding projectile points) were recovered. Some Archaic tools were also recovered.

Groundstone. Twenty-one groundstone tools were recovered, including mullers, abraders, ground and polished hematite, and unidentifiable ground stone.

Projectile Points. One hundred sixty-nine projectile points, whole or fragmented, were recovered, including 2 Class 34 (Collins var. Collins), 2 Class 58 (Tombigbee Stemmed var. Tombigbee), 2 Class 68 (Flint Creek var. Tombigbee), and 1 Class 107 (Late Archaic), Class 10 (Pickens var. Pickens), Class 1 (Madison var. Gainesville), Class 2, 4, 6, 7, 12 and 15 projectile points and 59 small triangular point fragments.

Table 41. Site 1Pi61. Some Direct Burial Associations.

Burial 8.	1 Class 2 point (DRC).
Burial 13b.	1 Class 2 point (Misc.) located in right rib cage. 1 Class 19 point (DRC). (Fig.54)
Burial 13c.	2 Class 4 points (DRC) in association with right ribs. (Fig. 54)
Burial 19	1 polished greenstone celt 145 mm long, 59 mm wide and 38 mm thick. One end is in the form of a transverse biconvex bit and the opposite end is a tapered poll or butt section. (Fig. 46)
Burial 27	1 polished greenstone celt 205 mm long, 68 mm wide, and 42 mm thick. One end is in the form of a transverse biconvex bit with an opposing tapered poll or butt section. (Fig.46)
Burial 35	1 Class 1 point (DRC) found in vertebral region. (Fig. 54)
Burial 55	1 Class 1 point (DRC) found inside vertebral foramen of 11th thoracic vertebrae. 1 Class 13 point (Misc.) from right thorax cavity under ribs. 1 Class 20 point (Misc.). (Fig. 54)
Burial 62b.	1 Class 2 point (Misc.) from left lower thoracic cavity. (Fig. 54)
Burial 76	1 Class 2 point (DRC).

Table 42. Site 1Pi61. Distribution of Arrow Points.

	Class																					
Provenience	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	19	168	169	170	171	Total
445NW510NE																						
Level 1	2		1	0	2				1	6								4	2		9	27
Subtotal	2	0	1	0	2	0	0	0	1	6	0	0	0	0	0	0	0	4	2	0	9	27
500NW510NE																						
Level 1	4			2			1			3		3						2	1	2	5	22
Level 2		1		1						1						1					2	6
Level 3	1																			1	2	4
Subtotal	5	1	0	3	0	0	0	0	0	4	0	3	0	0	0	1	0	2	1	3	9	32
510NW510NE																						
Level 1	2											1	1									4
Level 2	1	1	1	1						1								1	1		2	9
Level 3		1																			1	2
Level 4	1	1																1			1	4
Level 5	1											1									1	3
Level 6				1																		1
Level 7										1							1					2
Level 8	1									1												2
Level 9	1						1		1													3
Subtotal	7	3	1	2	0	0	1	0	1	3	0	2	1	0	0	0	1	2	1	0	5	30
500NW430N																						
Level 1	4	2	1	0						5								3			1	16
Level 2		1		0	1					2		1						2			2	9
Level 4																						0
Subtotal	4	3	1	0	1	0	0	0	0	7	0	1	0	0	0	0	0	5	0	0	3	25
500NW550NE																						
Level 1	4	4		3		1	1			6		1			1			2	1	1	10	35
Level 2				1														1			2	4
Subtotal	4	4	0	4	0	1	1	0	0	6	0	1	0	0	1	0	0	3	1	1	12	39
Features																						
Feature 2		1																			1	2
Feature 3										1									1		3	6
Feature 6	1																	1			1	3
Feature 17 East X-section										1											1	2
Feature 17 West X-section							1														1	2
Feature 17																						
Unit 3		1								1								1				3
Unit 1																		1				1
Feature 19			1																			1
Feature 20	2	3								2								1			6	14
Feature 22	1	1																				2
Feature 25		1						1	1	1				1			1	3			2	11
Feature 28 East Quad				1														1				2
Feature 28 West Quad																			1			1
Feature 29-A	1	1							1	1												4
Feature 29-A West-X Section																					1	1
Feature 29																						
Unit 1																		1				1
Unit 4																					1	1
Unit 3	1																				1	2
Unit 30																					1	1
Unit 17					1																	1
Feature 30	1																				1	2
Feature 31	2									2												4
Feature 32		1								1								1				3
Feature 36		1				1				1											2	5
Feature 37										1												1
Feature 38, Burial 34	1								1	3		1										6
Feature 39	1		2							1											1	5
Feature 40		1								2	1	2	1					1			1	9
Feature 41	[illegible]	1	1							1									1	1	1	7
Feature 44																			2	1	1	4
Feature 49		1																			1	2
Feature 50																		1	1		2	4
Feature 51																		2			2	4
Feature 52				1																		1
Feature 54		2															1	3	1	2		9
Feature 55	1	3								3									1		1	9
Feature 56																					1	1
Feature 57									2			1									3	6
Feature 58										1												1
Feature 62										1		1	1								1	4
Feature 63																			1			1
Feature 64							1															1
Feature 66		1																				1
Feature 71													1									1
Feature 72																					1	1
Feature 73										1											3	4
Feature 74																				1	1	2
Feature 76	1	1								2								1		1		6
Feature 77		1																	1			2
Feature 78																					1	1
Feature 79		1			1	1				2												5
Feature 82																			1			1
Feature 88																					1	1
Feature 89										1		1									1	1
Feature 91		2								1									1		1	5
Feature 92																						
Unit 9																		1				1
Unit 17																					1	1

Table 42. Site 1Pi61. Distribution of Arrow Points (Continued).

	Class																					
Provenience	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	19	168	169	170	171	Total
Feature 93	5	5		3				1		1			1		1	1		3	1	3	11	36
Feature 94																		1			2	3
Feature 95							1			1				1								3
Feature 95-B												1										1
Feature 97		2	1	1														2	1	1	3	11
Feature 98	2	1		1	1					1								1	1	1	4	13
Feature 100																		2				2
Feature 101	3									2								1			1	7
Feature 102	1	1	2						1													5
Feature 103																					1	1
Feature 105					2					2											1	5
Feature 107																					3	3
Feature 108												1	1									2
Feature 109		1								1			1					1				4
Feature 113										1												1
Feature 116		1																				1
Feature 117		2			1					1									1		2	7
Feature 119																					1	1
Feature 120																					1	1
Feature 122	1					1				2		1						2				7
Feature 123			1			1																2
Feature 124																			1		1	2
Feature 125																					1	1
Feature 128												1										1
Feature 129																			1			1
Feature 130																			1	1	2	4
Feature 133																					1	1
Feature 138	1																					1
Feature 139				1																	1	2
Feature 141	1	1	2	3						5		2						3		1	8	26
Feature 153	1	1	1	1	1		1		1		1					1		1			3	13
Feature 155																					1	1
Feature 156	1																	1				2
Feature 158											1										1	2
Feature 160																		1			1	2
Feature 163										1												1
Feature 165							1															1
Feature 166	2	2			1													1			1	7
Feature 180									1													1
Feature 181																					1	1
Feature 187										1												1
Feature 196											1											1
Feature 202												1										1
Feature 208		1		1																		2
Feature 210																					2	2
Feature 211	1									2								1	1	1	3	9
Feature 212	3	2	1	1		1	1			4					1			2			6	22
Feature 213		1																			1	2
Feature 216												1	1							1		3
Feature 217																	1					1
Feature 218	1			1						2											1	5
Feature 219		1																				1
Feature 222		1								1											1	3
Feature 225																					1	1
Feature 227										1												1
Feature 229										1												1
Feature 230																					1	1
Feature 235, Burial 16-B		1			1					1											1	4
Feature 241, Burial 22		1																				1
Feature 244 Burial 25										1												1
Feature 245, Burial 26	1					1				2												4
Burial 13a,b,c				1																		1
Burial 6		1																				1
Burial 30	2																					2
Surface	2	1		5	3			1	4	11		3	1	1	1		1	7	1		4	46
Subtotal	42	51	12	21	13	6	6	3	12	76	4	17	8	3	3	2	4	49	21	15	120	488
Class Totals	64	62	15	30	16	7	8	3	14	102	4	24	9	3	4	3	5	65	26	19	158	641

[illegible]	107	108	109	110	111	114	115	116	119	122	123	124	125	126	127	135	136	138	139	143	151	164	165	166	167	Total
																						1			1	4
																						1			1	4
																										:
																									1	1
																									1	2
	1																								1	2
	1																								1	2
																								1		1
																								1		1
																									3	3
																						1			2	4
																						1			3	7
																								1		1
																									1	1
																						1				2
																						1				1
																										1
														1												1
																									1	2
																						1	1	1	1	9
																										1
																									1	1
																							1		2	4
																										1
																							1			6
										1																3
				1																						1
																										1
																							1			1
																									1	1
																						1				2
							1																1			2
															1											1
																						2	1	1		4
																									1	1
																									1	1
																										1
																										1
																									1	1
																										2
																										2
													1													1
		1																				1				9
																						2				3
																										1
																1										1
																						1				4
														1												1
			1																							2
																						1			1	2
																						1				2
																									2	2
											1															1
																						1		1		2
																										1
																							1			2
																								1		1
																							1			1
					1												1									3
																										1
																										3
																										1
																										1
																									1	1
																										1
																							1			1
																										1
																									1	1
																									1	1
																		1				1				3
																									1	1
																										1
									1																	1
																										1
																										1
																						1				1
																							1			1
	0	1	1	1	1	0	1	0	1	1	1	1	0	2	1	1	1	1	0	0	0	15	10	5	17	133
				1	1	1		1		2	1	2	1					1	1	1	1	3		1	2	45
	1	1	1	2	2	1	1	1	1	3	2	3	1	2	1	1	1	2	1	1	1	20	10	7	27	178

	59	61	64	66	68	69	[illegible]	73	76	80	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	1[illegible]2	1[illegible]4	107	108	109	110	113	114	115	116
3	2	1	1	1	0	0	[illegible]	1	2	1	1	2	0	0	0	2	0	1	1	0	0	0	2	2	1	0	0	0	1	1	1	1	0	1	0
							1				2		1	1	1		1			1	1	1	5			1	[illegible]				1	1	1		1
4	2	1	1	1	1	1	1	4	2	1	3	2	1	1	1	2	1	1	1	1	1	1	4	[illegible]	1	1	1	1	1	1	2	2	1	1	1

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Table 43. Site 1Pi61. Distribution of Projectile Points.

Provenience	22	23	28	29	32	34	35	36	39	41	42	43	48	51	52	53	54	55	56	57	58	59	61	64	66	68	69	[illegible]	[illegible]
445NW510NE																													
Level 1						1																							
Subtotal						1																							
500NW510NE																													
Level 1																										1			
Level 2																													
Subtotal																													
510NW510NE																													
Level 5																													
Subtotal																													
500NW430NE																													
Level 1																													
Subtotal																													
500NW550NE																													
Level 1																													
Level 2																													
Subtotal																													
Features																													
Feature 2																													
Feature 9																													
Feature 14																			1										
Feature 15																													
Feature 17																													
Structure I																													
Unit 3						1																							
Feature 18																													
Feature 20																													
Feature 21														1						1	1	2							
Feature 22									1																				
Feature 23																													
Feature 25																				1									
Feature 26																					1								
Feature 27																		1		1									
Feature 30										1																			
Feature 32																													
Feature 35														1															
Feature 36																													
Feature 37																													
Feature 38																													
Burial 34								1																					
Feature 40																													
Feature 44																													
Feature 46																													
Feature 50																													
Feature 54																													
Feature 58																					1								
Feature 62																1													
Feature 63																													
Feature 66		1																											
Feature 69																				1									
Feature 73																													
Feature 74												1	1		2					1									
Feature 79																							1						
Feature 92																													
Structure 4																													
Unit 3																				1									
Feature 92																													
Structure 4																													
Unit 24																													
Feature 93					1	1											1												
Feature 95, Zone A																													
Feature 97			1																										
Feature 98																													
Feature 101																				1									
Feature 120																													
Feature 124																													
Feature 128																													
Feature 130																													
Burial 58											1																		
Feature 135									1																				
Feature 138																													
Feature 142																													
Feature 143																													1
Feature 144																													
Feature 153	1																												
Feature 157																													
Feature 158																									1				
Feature 159																													
Feature 161																													
Feature 175																													
Feature 180																				1									
Feature 197																													
Feature 203																													
Feature 206																													
Feature 211																													
Feature 212																													
Feature 222																													
Feature 227							1																						
Feature 228																								1					
Feature 243																													
Burial 24																													
Burial 6																													
Subtotal	1	1	1	0	1	2	1	1	2	1	1	1	1	2	2	1	1	1	2	8	3	2	1	1	1	0	0	[illegible]	1
Surface				1		1			1		1	2						2		2							1	1	
Class Totals	1	1	1	1	1	4	1	1	3	1	2	3	1	2	2	1	1	3	2	10	4	2	1	1	1	1	1	1	[illegible]

Table 44. Site 1Pi61. Introduced Rock in Excavation Units (50% Sample).

PROVENIENCE Level	Unit	Firecracked/ Crazed Chert CT	Firecracked/ Crazed Chert WT	Cracked and Irreg. Flaked Cobble/ Cobble Fragments CT	Unmodified Sandstone CT	Unmodified Sandstone WT	Unmodified Chalk CT	Unmodified Chalk WT	Unmodified Conglomerate CT	Unmodified Conglomerate WT	Unmodified Breccia CT	Unmodified Breccia WT	Hematite CT	Hematite WT	Limonite CT	Limonite WT	Cobble-Pebble WT	Petrified Wood CT	Limestone CT	Limestone WT	TOTALS CT	TOTALS WT
	500NW 550NE																					
1		1,653	2,955	56	29	209	15	139					25	32	34	54	2,008	3			1,815	5,397
2		150	340	9	16	400							16	23	6	5	1,345	1			198	2,113
	Subtotal	1,803	3,295	65	45	609	15	139	-	-	-	-	41	55	40	59	3,353	4	-	-	2,013	7,510
	500NW 510NE																					
1		1,624	2,259	31	26	262	12	125					11	15	32	17	1,461	5			1,741	4,139
2		659	1,113	21	25	336	3	27					9	7	2	1	361	1			720	1,845
3		270	678	13	12	212	2	24	1	26			1	2	5	3	948				304	1,893
	Subtotal	2,553	4,050	65	63	810	17	176	1	26	-	-	21	24	39	21	2,770	6	-	-	2,765	7,877
	510NW 510NE																					
1		237	388	8	7	54	3	46					4	2	2	1	285	1			262	776
2		614	1,110	10	6	87	2	8			1	1	5	14	9		788	1			648	2,008
3		433	1,035	14	14	135	8	16					6	4	5	2	617	3			483	1,809
4		345	721	11	9	162	3	4					4	3	4	2	452		1	7	377	1,351
5		235	441	10	4	19	1	2							1	10.4	437				251	899.4
6		122	205	3	5	6									1	14	174	1			132	399
7		154	224	6	3	5	2	16					3	6			199				168	450
8		111	164	1	3	10							1	1			142				116	317
9		38	37		2	3							4	11			69				44	120
	Subtota.	2,289	4,325	63	53	481	19	92	-	-	1	1	27	41	22	19.4	3,163	6	1	7	2,481	8,129
	445NW 510NE																					
1 & 2	Subtotal	1,329	2,272	33	35	381	14	53	-	-	-	-	40	58	27	36	2,142	2	-	-	1,480	4,944
	500NW 430NE																					
1		1,679	2,926	28	29	426	11	41					2	1	20	16	1,322	5			1,774	4,732
2		381	758	10	19	326	2	9					1	0.7	10	47	926	3			426	2,066.7
	Subtotal	2,060	3,684	38	48	752	13	50	-	-	-	-	3	1.7	30	63	2,248	8	-	-	2,200	6,799
	TOTAL	10,034	17,626	264	244	3,033	78	512	1	26	1	1	132	179.7	158	198.4	13,676	26	1	7	10,939	35,259

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Table 45. Site 1Pi61. Introduced Rock in Features.

Provenience Feature	[illegible] CT	[illegible] WT	Crazed and Iron Stained Cobble/Pebble Fragments CT	Unmodified Sandstone CT	Unmodified Sandstone WT	Unmodified Chert CT	Unmodified Chert WT	Unmodified Conglomerate CT	Unmodified Conglomerate WT	Unmodified Breccia CT	Unmodified Breccia WT	Hematite CT	Hematite WT	Limonite CT	Limonite WT	Cobbles Pebbles WT	Petrified Wood CT	Petrified Wood WT	Steatite CT	Steatite WT	Greenstone CT	Greenstone WT	Siltstone CT	Siltstone WT	Limestone CT	Limestone WT	Fossilized Shark Teeth CT	Fossilized Shark Teeth WT	Fossilized Bone CT	Fossilized Bone WT	Fossilized Oyster Shell CT	Fossilized Oyster Shell WT	TOTALS CT	TOTALS WT
[illegible]	1	3														2																	7	5
[illegible]	209	472	5	14	15	1	2					6	6	4	1	2																	239	501
[illegible]	224	236	4	4	48	1	4					7	31			189	1																247	598
[illegible]	23	52		4	17							2	2			171																	29	262
5 (Burial 1)	132	151	9	11	80							1	1	11	34	85																	142	551
7 (Burial 2)	83	[illegible]		6	24							5	2	1	5	104																	97	385
8	1	[illegible]	3													1																	4	1
9	2	2		2	1	1	0.1									30																	5	33
10	13	66	1	2	6											32																	1	104
11	2	3														14																	2	17
12 (Burial 37)	27	44	[illegible]	2	16	1	8					1	1			20																	32	89
13	25	58														1																	25	59
14	13	42	6	12	180	2	2					5	110			367																	39	701
15	119	356	20	26	501	13	432					11	7	55	247	367									2	[illegible]							249	1,982
16	23	120	1	23	209	9	163					2	3	4	5	102																	62	802
18	39	126	5	8	135	17	1,496							23	132	542	1																93	2,431
19	103	367	9	2	20	1	2							7	69	104																	116	571
20 (Burial 28)	371	1,065	15	34	579									23	83	921			2	13													445	2,621
21	114	289	14	10	189							3	2	5	6	630																	160	1,115
22	274	563	13	18	203	1	1					4	6	3	14	341																	313	1,131
23	21	22	1	1	5											77																	23	104
25	582	1,577	23	49	734	19	139					20	14	3	44	1,216	1								1	117							737	3,861
26	80	427	2	21	235	1	0.2					1	1			469																	105	932
27	211	562	35	55	787									57	170	[illegible]	3		7	[illegible]													378	[illegible]
31	936	1,201	7	17	221							1	1	3	[illegible]	289	2																966	1,713
32	137	960	13	30	560	1	4					3	2	11	34	1,001																	195	2,561
32A	222	856	7	35	355			1	2			16	79	14	77	938																	295	2,296
32B	34	43	5	10	144							6	8			55																	55	250
34	151	346	3	9	31							5	[illegible]	4	27	135	1																172	558
35	11	83	4											2	2	34	1																18	119
36	790	1,357	5	25	101	1	8							11	33	187			1	16													833	[illegible]
37	46	80	3	3	20	1	3							3	66	162																	56	331
38 (Burial 34)	602	1,507	27	25	474	5	210					21	75			1,902	1		1	13					2	4							684	4,189
39 (Burial 33)	235	254	3	16	271	1	27							11	11	1,591																	266	2,184
40 (Burial 32)	533	1,489	18	34	[illegible]	7	80	1	60					20	81	1,245	1																614	3,388
41 (Burial 35)	326	717	17	33	172	2	2			1	19			10	100	981	1																408	1,990
42																28																	–	28
43	46	96	3									1	2.2	2	7	118	1																55	223
44	237	500	1	12	61	4	22					42	32	55	78	355																	333	1,064
45	61	130	2	4	36	2	2							5	4	134																	76	276
46	171	431	18	28	68	1	11					14	35	1	8	1,344	1																236	1,947
47				4	55									1	3																		5	58
49 (Burial 3)	51	[illegible]	1													52																	52	117
50	137	230	1	14	50							10	2	2	11	155																	164	[illegible]
51	126	158	8	25	108	2	2					13	16	2	1	409																	174	[illegible]
52 (Burial 36)	165	126	1	2	7	2	8							6	3	67																	175	211
53 (Burial 38)	5	4	1	2	42											38																	9	128
54	253	[illegible]	[illegible]	25	567	2	29					7	12	8	106	610																	100	2,085
55	372	704	[illegible]	40	415	7	81					9	10	11	[illegible]	606																	445	1,820
56	47	43		4	11	1	2					1	1			146																	55	243
57	225	569	6	1	14	10	86							1	[illegible]	216																	243	865
58	110	562	4	8	226	1	50					1	71	17	[illegible]	72																	141	1,096
60	19	33														19	1																21	52
61	26	61	6	4	50											173																	36	284
62	190	635	8	31	[illegible]	1	9					4	27			744	1																239	1,871
63	232	783	14	24	[illegible]	3	59					2	7	16	140	1,937																	281	2,287
64	21	118														86																	21	204
65	24	386	9	13	315							2	2	7	31	375																	56	1,089
66	159	358	20	117	506	2	1					55	98	9	3	1,510	1																173	[illegible]
67 (Burial 39)	1	1		1	1																												2	2
69	266	613	15	63	704	15	16					6	66	4	11	658																	353	2,064
71	52	48			2							2	3			38																	58	91
72	39	55	2	7	14							1	1	1	1	71																	59	142
73	72	183	13	5	58							3	2			186																	91	427
74	33	98	32	59	565							12	31	32	62	1,644	5																151	2,380
75	10	36		1	6	1	10							2	1	19	1																15	72
76	165	654	9	5	9							6	5	6	10	281			1	0.1													192	959
77	343	378	14	5	12							4	2			166																	366	578
78 (Burial 41)	77	209	1	2	6	1	8					2	3			[illegible]																	53	401
79	200	376	6	18	132	1	5					8	7			292																	233	812
80				1	12																												1	12
81	15	23												1	0.3	7																	16	30
82	53	124	1	8	[illegible]							5	8			193																	66	[illegible]
84	46	127	5	19	177	1	30					2	2			262																	75	598
85	31	126		1	58							1	3	1	1	85																	38	273
86	49	86	[illegible]	13	12	5	23					3	6			508	1																76	635
87	8	59		3	95											159																	11	313
88	14	67	3	6	18							2	1	51	125	63																	96	274
89	32	91	1			5	2							8	11	45																	46	149
90	15	15	[illegible]	2	20							1	2			221	1																21	258
92	268	994	9	5	[illegible]	2	236					11	14	14	28	1,971							1	1									330	3,346
93	1,304	2,952	43	100	773	25	170					7	4	67	126	1,645																	1,528	5,670
94 (Burial 42,43,44)	139	168	8	4	36	1	1					1	2			403	2																154	612
95	165	424	4	24	263	3	6					9	3	10	17	494	4																199	1,205
95A	207	486	5	4	49	1	9					1	19	2	14	203	1																226	799
95B	43	76	1	1	29									2	3	103																	49	211

Table 45. Site 1Pi61. Introduced Rock in Features (Continued).

PROVENIENCE Feature	Firecracked Ct	Firecracked Wt	[illegible] Ct	[illegible] Ct	[illegible] Wt	[illegible] Ct	[illegible] Wt	[illegible] Ct	[illegible] Wt	[illegible]	[illegible] Ct	[illegible] Wt	[illegible] Ct	[illegible] Wt	[illegible]	[illegible] Ct	[illegible] Wt	[illegible]	[illegible] Ct	[illegible] Wt	[illegible]	[illegible] Ct	[illegible] Wt	[illegible] Ct	[illegible] Wt	[illegible] Ct	[illegible] Wt	[illegible]	Totals Ct	Totals Wt
95C	76	257	4	3	66						58	46	21	7	440	1													163	816
96	1	1													2														1	3
97	910	1,713	18	39	292	5	411				9	9	15	39	1,195							3	2			1	17		1,000	3,898
97A				10	9								1	1	5														11	15
98(Burial 46)	1,296	1,911	23	56	607	14	46				21	19			1,441	1													1,411	6,024
99	12	20	1								1	1			11														14	32
100(Burial 49)	164	239	11	7	41	9	17						3	1	241														133	539
101(Burial 48)	309	562	12	34	205	5	9				8	5	4	4	411														376	1,196
102	101	137	2	9	31						2	2			85														114	255
103(Burial 50)	20	32		4	5						1	1	2	1	49														37	128
104	18	34	2			1	1								3														21	40
105	90	284	70	14	113	3	36				9	23			175														124	631
106	34	35	1								1	0.3			2														36	37
107	386	666	6	7	105	1	7				2	3			68														402	949
108	151	245	12	9	71	3	27				2	2	1	1	230														178	626
109	149	530	8	3	17								2	2	380														161	929
111(Burial 51)	72	125		3	4								1	20	130														76	279
112	5	4	2												2														7	6
113	34	62	2	11	17										53														67	132
114	21	56		2	27										54														23	145
115(Burial 52)	8	4		1	19										1														9	23
116	42	98	1	3	33						1	1			108														47	240
117	169	436	11	29	254						18	35			378														227	1,103
118(Burial 53)	3	21																											3	21
119(Burial 54)	53	136	1	1	36						2	1			37														57	212
120	174	201	8	16	129	1	6				4	10	26	36	252														227	632
121				4	2						3	1			1														7	4
122	830	2,907	58	28	402						8	11	2	2	425	1													927	3,767
123	103	204	2	5	40										172														110	426
124(Burial 56)	116	173	6	14	51						4	6	3	2	395														141	627
125	36	88		1	47	1	35								54														39	224
126	30	67	5	8	93						2	2	1	0.3	96														46	258
127	18	44		3	8						1	1	1	0.4	48														23	
128	128	420	16	30	204	1	1				9	8	9	61	1,062	2			1	1									196	1,757
129(Burial 57)	18	77	3								2	3			166														23	226
130(Burial 58)	138	144	5	1	1			1	30		3	4			136							2							150	339
131(Burial 61 A&B)	197	343	12	21	100						2	2	1	1	193														233	639
132(Burial 59)	119	143	8	10	39	1	0.1				5	7	1	1	232														146	422
133(Burial 60)	123	383	18	11	42	1	2				11	24			508	2													166	959
134	26	36	2	3	1						5	4			89														36	130
135	77	182	5	12	153						2	1	1	1	281	3													100	618
136	160	279		258	2,978	9	3				11	6	308	500	494														745	4,260
137	14	15	3	1	1										200														18	216
138	510	733	25	46	207	6	5				20	41			1,013	1													608	1,999
139(Burial 62)	206	371	17	30	99						16	8	1	4	536														266	991
140	170	263		2	56								1	1	2														173	232
141(Burial 63)	1,107	2,250	57	185	1,875	6	39				36	28	36	126	1,377	21	127							1	1				1,467	5,423
142	69	117	3	27	104						4	7	2	5	287														105	514
143	63	249	4	101	967	1	0.2				14	19	3	2	962	1	0.1												187	2,199
144	31	145	17	162	1,261	23	28				31	49	3	1	661														271	2,115
145	17	33	2	25	117						3	1			165														47	318
146	8	19		2	2										20														13	61
147	39	79	2	5	61						2	2			73														45	215
148	9	34		11	70										8	1	1												21	113
149	5	2		4	28										42														9	72
150(Burial 64)	49	94	1	6	6										57														56	157
151(Burial 65)	18	42	2												14	1	1												21	57
152	30	109		166	1,012	15	4				2	6	19	13	410														232	1,556
153	987	1,638	10	99	221	32	21				44	61	5	11	1,168	6	7												1,203	3,327
154(Burial 66)	21	36	1	2	3						1	1			74														25	116
155	20	39	1	3	8										19														24	66
156	63	68	4	29	29						6	3	1	6	262	1	1												104	369
157(Burial 67)	103	208	1	4	19	1	7				2	8			164														111	406
158(Burial 71)	127	258	7	5	5								5	4	349														144	616
159	2	1		1	0.1										1														3	
160(Burial 70)	70	241	4	9	101						4	1	1	3	199														95	365
161	41	93	5	27	192								21	17	436														94	938
162(Burial 69)	63	113	3	9	61						5	3	2	1	195														92	173
163	67	233	5	5	26						2	1	1	60	125														43	465
164	37	124	3	12	43	2	23				19	18	1	1	68														74	277
165(Burial 73)	86	116	4	2	2	3	41				3	4	2	2	217														100	380
166	1,505	1,805	20	33	158	12	12				2	2	10	17	270	1	3												1,583	2,287
167	34	41	2	3	2						1	1			68														50	112
168	17	26	7	1	2										21														25	67
171	10	2		1	1								1	1	20														12	25
172	31	196	4	62	623						12	6	30	17	281	7	23												146	1,146
173	1	2	1	6	23						3	1			36														11	62
174	43	63	1	10	43	2	7				2	2	1	1	89														39	205
175	6	7	1	3	3								4	5	34														11	69
176(Burial 75)	4	2													5														4	[illegible]
177(Burial 76)	5	2		1	1.3										6														6	8
178(Burial 77)	40	20		1	17										66														11	[illegible]
179(Burial 78)	170	290	1	25	218						8	3			297	2	1												208	479
180(Burial 79)	122	158	12	8	33	2	1				4	2	5	50	265	3	5												156	515
181	56	117	6	19	200						2	1	2	1	143	1	2												86	444
182	73	119		40	446	1	41				2	2			71														116	639
183	4	2													5															
184	131	224	5	20	197	2	996				3	1			677														163	2,092
185															19														-	9
186															1														-	1

Table 45. Site 1Pi61. Introduced Rock in Features (Continued).

PROVENIENCE Feature	Fire-cracked/Crazed Chert CT	Fire-cracked/Crazed Chert WT	Cracked and Fire-Flaked Cobbles/Cobble Fragments CT	Unmodified Sandstone CT	Unmodified Sandstone WT	Unmodified Chalk CT	Unmodified Chalk WT	Unmodified Conglomerate CT	Unmodified Conglomerate WT	Unmodified Breccia CT	Unmodified Breccia WT	Hematite CT	Hematite WT	Limonite CT	Limonite WT	Cobbles/Pebbles WT	Petrified Wood CT	Petrified Wood WT	Steatite CT	Steatite WT	Greenstone CT	Greenstone WT	Siltstone CT	Siltstone WT	Limestone CT	Limestone WT	Fossilized Shark Teeth CT	Fossilized Shark Teeth WT	Fossilized Bone CT	Fossilized Bone WT	Fossilized Oyster Shell CT	Fossilized Oyster Shell WT	TOTALS CT	TOTALS WT
187	58	194	3	11	37							7	3	2	2	115																	81	351
188	5	30		10	103							1	1			16	1	1															17	151
189(Burial 80)	88	165	4	3	31							2	1	27	18	195									1	1							125	411
190	130	254	5	196	3,088	4	2					46	41	25	6	725	3	3															409	4,119
191	8	21		1	1	1	1					2	5			65																	12	73
192	2	1		2	25							1	0.2			9																	5	35
193 & 194	57	82	3	7	71			1	84			5	3			192																	73	432
195	6	4	1	1	1											12																	8	17
196	40	33	1	5	30											92																	46	155
197	12	81		2	1							1	21			28																	15	133
198	6	4		11	31											26																	17	61
199	3	1														2																	3	3
200	8	31	1											3	1	7																	12	39
201	35	95	2	6	6	1	1					2	4	1	13	63																	47	182
202	40	88	5	2	2							2	5	2	11	89	1	1															52	196
203	12	18	1	2	8							3	2			62																	18	70
204	81	189	14	13	125							9	15			320															1		118	649
205	14	22		2	6											19																	36	47
206	68	219	6	32	259							12	21	1	1	482	3	2															122	986
207	10	15	1	2	1							1	1			4																	14	21
208	58	66	7	3	10	1	0.4					4	4			156																	73	236
209	96	143	4	11	175							5	2			65																	116	385
210(Burial 83)	169	327	13	8	46							1	1	23	38	262									1	3							215	677
211(Burial 82)	344	679	24	32	286	2	1					17	13	3	1	854																	422	1,836
212	929	2,252	16	120	975	12	91					56	90	36	56	1,593																	1,169	5,037
213	91	147	6	16	33							9	9	1	0.1	209	1	4															124	402
214	36	56	5	2	1							2	1			50																	45	108
215	18	22	1	1	56							2	1			82																	22	159
216	345	397	15	18	121							4	1	3	1	518																	385	1,038
217	81	92	8	11	24			1	38			1	17	3	14	294	1	1															106	477
218(Burial 45)	88	152	3	4	18							4	9	2	2	113																	101	294
219(Burial 84)	56	135	7	6	95							5	14			108	1	1															72	353
220	35	134	2	3	2							4	3			278																	44	417
221	8	10		2	23											53																	19	86
222	23	80	3	1	24							1	1	1	1	14																	29	120
223A	20	166	5	63	663	1	1					4	3			252	1	1															96	1,086
223B	23	56		76	161							4	4			49	3	15															196	285
224	16	41	2	5	5									1	1	54	1	[illegible]															25	106
225(Burial 86)	15	32	1	1	[illegible]											[illegible]									1	5							[illegible]	137
226	1	9														4																	1	[illegible]
227	4	19	1	1	1							1	1			19																	12	40
[illegible]	[illegible]	129	2	8	141							1	[illegible]			96	1	2															76	367
[illegible]	17	39	1		4											16																	22	58
230	98	266	3	6	131							11	22	7	5	136																	125	561
231(Burial [illegible])	44	32	1													58																	45	89
[illegible](Burial [illegible])	10	17		1	7											15																	11	39
[illegible](Burial [illegible])	96	102		1	6							11	57	2	9	98																	[illegible]	272
236(Burial 17)	41	103	1	2	72											65																	[illegible]	220
[illegible](Burial [illegible])	15	48														52	1	1															19	[illegible]
[illegible](Burial [illegible])	13	29		3	10									1	64																		17	107
[illegible](Burial [illegible])	19	17		1	1							2	1			[illegible]																	22	149
[illegible](Burial [illegible])	44	65	2	7	121							2	2			[illegible]																	55	339
[illegible](Burial [illegible])	56	115		1	15									1	1	100	2	28															60	[illegible]
[illegible](Burial [illegible])	58	123	5	[illegible]	24			1	1			2	1			260																	66	[illegible]
[illegible](Burial [illegible])	[illegible]	[illegible]	1		[illegible]											[illegible]																	[illegible]	[illegible]
[illegible](Burial [illegible])	27	[illegible]		10	143											[illegible]																	37	[illegible]
Burial [illegible]	42	7														5																	[illegible]	[illegible]
Burial [illegible]	12	9				[illegible]	[illegible]									5	1	0.3															15	21
Burial 6	34	117		9	99									1	1	18																	[illegible]	[illegible]
Burial 9	8	4	1	2	4											2																	11	10
Burial 13	12	10	1	2	1											66																	15	79
Burial 14	26	27		2	82											99																	32	206
Burial 30	15	14	1	1	4									1	2	20																	44	[illegible]
TOTAL	29,8[illegible]	62,812.2	1,340	1,962	36,019.4	166	5,476	6	217	1	[illegible]	1,099	1,780.1	1,122	3,417.5	64,914	112	237.4	12	98.3	1	1	1	1	13	204	1	1	1	17	1	-	35,069	175,124

Table 46. Site 1Pi61. Introduced Rock in Structure I (Feature 17).

PROVENIENCE	CATEGORY														
	Firecracked/ Crazed Chert		Cracked & Irreg. Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Hematite		Limonite		Cobble-Pebbles	Petrified Wood		TOTALS	
Feature Unit/Section	CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	WT	CT	WT
17A	16	21	2	1	0.5							180			19	201.5
17B	19	15	1	1	22			2	0.6			34			23	71.6
17C	3	0.6										9			3	9.6
17 East Cross Section	137	206	4	20	129	1	2	6	4	1	1	303	1	4	170	649
17 West Cross Section	236	396	1	9	210	5	18	5	5			219			256	848
17 Unit 1	104	130	2	2	2	1	5	3	2			94			112	233
17 Unit 2	36	101	1	2	2					5	34	114	1	C.4	45	251.4
17 Unit 3	136	289	4									255	1	1	141	545
17 Unit 4	60	98	1					1	1			55			62	154
TOTAL	747	1,256.6	16	35	365.5	7	25	17	12.6	6	35	1,263	3	5.4	831	2,963.1

Table 47. Site 1P161. Introducted Rock from Structure II (Feature 28).

PROVENIENCE	CATEGORY											
	Firecracked/ Crazed Chert		Cracked & Irreg. Flaked Cobble	Unmodified Sandstone		Hematite		Limonite		Cobble-Pebbles	TOTALS	
Unit	CT	WT	CT	CT	WT	CT	WT	CT	WT	WT	CT	WT
Feature 28 Quad												
28 North Quad	7	7	3	1	12	3	8			172	14	199.
28 South Quad	54	97	6	1	44	3	3			142	64	286.
28 East Quad	106	134	8	9	50	2	2	6	6	230	131	422.
28 West Quad	63	119	3			3	49	2	0.6	146	71	314.6
TOTAL	230	357	20	11	106	11	62	8	6.6	690	280	1,221.6

Table 48. Site 1Pi61. Introduced Rock in Structure III (Feature 29).

PROVENIENCE	CATEGORY													
	Firecracked/ Crazed Chert		Cracked & Irreg. Flaked Cobbles/ Cobble Fragments	Unmodified Sandstone		Unmodified Chalk		Hematite		Limonite		Cobble-Pebble	TOTALS	
Structure 3 (Feature 29)	CT	WT	CT	CT	WT	CT	WT	CT	WT	CT	WT	WT	CT	WT
29A	31	79	1							1	1	17	33	97
29A Cross Section	62	100	7	4	73			1	2			327	74	502
29B Burial 45	121	138	4	4	34							171	129	343
29C	2	1		1	0.4							3	3	4.4
29 Unit 1	24	32										7	24	39
29 Unit 2	24	27										1	24	28
29 Unit 3	32	29						2	1			10	34	40
29 Unit 4	36	38	1									31	37	69
29 Unit 5	3	2	1	1	0.5							1	5	3.5
29 Unit 6	6	11										8	6	19
29 Unit 7	13	7						2	4			3	15	14
29 Unit 8	20	13										3	20	16
29 Unit 9	15	11				1	1					2	16	14
29 Unit 10	33	25	2	1	1							36	36	62
29 Unit 11	9	6		1	37							3	10	46
29 Unit 12	17	15										35	17	50
29 Unit 13	13	20	2	1	0.5	1	0.3			1	0.5	14	18	35.3
29 Unit 14	21	14		1	28							9	22	51
29 Unit 15	1	0.2											1	0.2
29 Unit 16	33	35										5	33	40
29 Unit 17	12	6		1	1							17	13	24
29 Unit 18	28	52	1									45	29	97
29 Unit 19	18	34										4	18	38
29 Unit 20	22	27						1	1			62	23	90
29 Unit 21	35	58	1	2	9							14	38	81
29 Unit 22	28	28										18	28	46
29 Unit 23	26	23	1									7	27	30
29 Unit 24	21	31						1	1			6	22	38
29 Unit 25	22	17		1	0.3							52	23	69.3
29 Unit 26	10	11	1	1	9							8	12	28
29 Unit 27	22	41	1	2	7							57	25	105
29 Unit 28	9	16										5	9	11
29 Unit 29	9	7										1	9	8
29 Unit 30	48	45	1	1	1							17	50	63
29 Unit 31	4	3										3	4	6
29 Unit 32	20	41										7	20	48
29 Unit 33	12	23										11	12	34
29 Unit 34	7	59				1	3					7	8	69
29 Unit 35	8	13		2	12							1	10	26
29 Wall Trench 1	38	29		6	27							44	44	100
29 Wall Trench 2	70	110	1	3	10			2	7	1	1	181	77	309
TOTAL	985	1,267.2	25	33	250.7	3	4.3	9	16	3	2.5	1,253	1,058	2,793.7

Table 49. Site 1Pi61. Introduced Rock in Structure IV (Feature 92).

PROVENIENCE Structure 4 (Feature 92)	Firecracked/ Crazed Chert CT	Firecracked/ Crazed Chert WT	Cracked & Irreg. Flaked Cobbles/ Cobble Fragments CT	Unmodified Sandstone CT	Unmodified Sandstone WT	Unmodified Chalk CT	Unmodified Chalk WT	Hematite CT	Hematite WT	Limonite CT	Limonite WT	Cobble-Pebble WT	Petrified Wood CT	Petrified Wood WT	Steatite CT	Steatite WT	TOTALS CT	TOTALS WT
Feature 92																		
Unit 1	14	18		2	59							14					16	91
Unit 3	17	27	1	2	1					1	1	30					21	59
Unit 5	1	2										2					1	4
Unit 6	4	5	1									13					5	18
Unit 7	16	9	3	1	1							23					20	33
Unit 8	49	63	2					3	1			42					54	106
Unit 9	42	50										16					42	66
Unit 10	6	2	1									7					7	9
Unit 11	5	0.7										290	1	1			6	291.7
Unit 12	25	18	2	1	1			4	3			323					32	345
Unit 13	19	29		1	31			2	1			127					22	188
Unit 14	45	79	1							1	1	87					47	167
Unit 15	2	3										8					2	11
Unit 16	4	8										3					4	11
Unit 17	10	32		1	3							39	1	2			12	76
Unit 18	19	25				1	1			1	1	35					21	62
Unit 19	23	16	3					1	0.3			44					27	60.3
Unit 20	1	1										11					1	12
Unit 21	2	7		1	1							2					3	10
Unit 22	22	44		1	4			1	2			248					24	298
Unit 23	18	14	1	4	6			2	6	1	6	39	1	3			27	74
Unit 24	37	124	1	8	91			6	9	1	1	59			3	1	56	285
Unit 25	1	0.5		1	1							0.7					2	2.2
Feature 92A	4	2	1									6					5	8
TOTAL	386	579.2	17	23	199	1	1	19	22.3	5	10	1,468.7	3	6	3	1	457	2,287.2

Table 50. Site 1Pi61. Debitage in Structure I (Feature 17).

PROVENIENCE	CATEGORY																			
	Primary Decortication Flakes				Secondary Decortication Flakes			Bifacial Thinning Flakes				Other Flakes					Amorphous Flakes	Blade-like Flakes		
Feature Unit/Section	DC	RC	YC	MC	DC	YC	MC	DC	YC	TQ	MC	DC	YC	TQ	MC	FC-BC	MC	DC	MC	TOTALS
17A	6				20	3	4	8	1		1	2				1		3		49
17B	3			2	14	1	7	7			3							1		38
17C														1						1
17 East Cross Section	16			4	70		6	24		1	2	8		4				1	1	137
17 West Cross Section	36		2	9	116	6	24	57			4	29	1	1	4		1	1		291
17 Unit 1	14	2	1	2	54	2	9	25	1		1	12	1	3	4					131
17 Unit 2	5				19	2	1	9			2	2						1		41
17 Unit 3	12		1	2	67		6	28	1		8	8	1		2			3		139
17 Unit 4	1		2	9	33	1	2	24	1		4	15		2	3		1	1		99
TOTAL	93	2	6	28	393	15	59	182	4	1	25	76	3	11	13	1	2	11	1	926

Table 51. Site 1Pi61. Debitage in Structure II (Feature 28).

PROVENIENCE	CATEGORY																					
	Primary Decortication Flakes				Secondary Decortication Flakes				Bifacial Thinning Flakes							Other Flakes				Amorphous Flakes	Blade-like Flakes	
Unit	DC	RC	YC	MC	DC	RC	YC	MC	DC	RC	YC	TQ	MC	OE	FC-BC	DC	YC	TQ	MC	IC	JC	TOTALS
Feature 28 Quad																						
28 North Quad					5		2		4		2						1					14
28 South Quad	6		3	5	51		5	61	20		1		4	1		12	1	1	3		3	177
28 East Quad	26		3	3	101	11	6	14	52	4	7	3	10		1	16	1	3	4	2		267
28 West Quad	9	1	4	2	33		7	8	21		2		5			10	1		3		1	107
TOTAL	41	1	10	10	190	11	20	83	97	4	12	3	19	1	1	38	4	4	10	2	4	565

Table 52. Site 1Pi61. Debitage in Structure III (Feature 29).

PROVENIENCE	CATEGORY																								
	Primary Decortication Flakes				Secondary Decortication Flakes				Bifacial Thinning Flakes						Other Flakes						Amorphous Flakes		Blade-like Flakes		
Feature	DC	YC	MC	OE	DC	RC	YC	MC	DC	RC	YC	TQ	MC	OE	DC	RC	YC	TQ	MC	OE	YC	MC	DC	MC	TOTALS
29A	4				44			7	7	3	2		2		1				1						71
29A Cross Section	11	1	1		82	1		9	25				5					1	2	1	1		2		142
29B Burial 45	7	1			59	2	4	9	22		3	1	10		4		3	1	4				1		131
29C					1			1	1																3
29 Unit 1	1				20	1		5	4		1				3			1					1		37
29 Unit 2	2				13			5	12		1		2						1						36
29 Unit 3	6	1	2		26		•	4	11				1	1					2						54
29 Unit 4	1	1			14		1	5	4		1		2		2								1		32
29 Unit 5	3				4			3	8		1							1							20
29 Unit 6	2				2			1	2	1	1												1		10
29 Unit 7	2				5	1	1	2	2			1			2				1				1		18
29 Unit 8	4		1		7		1	2	3				1		1										20
29 Unit 9	1				2			1					3		2										9
29 Unit 10	4	1	1		19		2	6	12		2		1	1	2										51
29 Unit 11					5			2	4						2				1						14
29 Unit 12	4		1		20		1	3	6	1			3		1									1	41
29 Unit 13	1	1	1		9		1	5	6	1			2		2									1	30
29 Unit 14	1				18		1	3	6		3		1			1									34
29 Unit 15								1	1		1		1												4
29 Unit 16	1				5			8	1	1	1		2		1				1				1		22
29 Unit 17	2				2			1	2		1				2										10
29 Unit 18	3				11		1	4	9				1		1		1						2		33
29 Unit 19					13			1	7										2			1			24
29 Unit 20	3	1			3		1		5				2						1						16
29 Unit 21	5		1		14			3	11				1						2						37
29 Unit 22	3		1		19		1	3	4	1			2		1				2				1		38
29 Unit 23	2		1		20		1	2	6	1			1								1				35
29 Unit 24	4		1		9			1	9																24
29 Unit 25					16	1	1	2	5			1	2		1										29
29 Unit 26	1	1			5			3																	10
29 Unit 27	2				13			2	5				1										1		24
29 Unit 28	2				6			1	1	2			1												13
29 Unit 29					3			1																	4
29 Unit 30	2				32			8	12				3		3				1	1			1		63
29 Unit 31				1	1					1					1										4
29 Unit 32	1				6			2	3				1												13
29 Unit 33	1				6			3	3	1			3		3										20
29 Unit 34					8				1		1		2			1							2		15
29 Unit 35					6			2	1		1		1												11
29 Wall Trench 1	11	1	1		12			6	7		3				5			1	2						49
29 Wall Trench 2	2				53	1	1	8	47	1	7		6	1	3		2						4		136
TOTAL	99	9	12	1	613	7	18	135	275	14	30	3	63	3	43	2	6	5	23	2	2	1	19	2	1,387

Table 53. Site 1Pi61. Debitage in Structure IV (Feature 92).

PROVENIENCE	CATEGORY																													
	Primary Decortication Flakes				Secondary Decortication Flakes					Bifacial Thinning Flakes								Other Flakes								Amorphous Flakes		Blade-like Flakes		
Unit	DC	RC	YC	MC	DC	RC	YC	MC	AC	DC	RC	YC	TQ	MC	AG	OE	FC-BC	DC	RC	YC	TQ	MC	AG	OE	FC-BC	DC	MC	DC	MC	TOTALS
92 Unit 1	2				4			3		1														1						11
92 Unit 2																				1										1
92 Unit 3	3				15		1	3		[illegible]			1	2		1		2				2							1	35
92 Unit 5					1			2						1		1														5
92 Unit 6	1				2			1		[illegible]					1	1				1										10
92 Unit 7	2			1	17			6		[illegible]		1		3								3								37
92 Unit 8	5		1	2	22		3	1		[illegible]		1		2				7	1		1	1	1							55
92 Unit 9	2				27		[illegible]	[illegible]	[illegible]	[illegible]				3				3		2	1	2		1						60
92 Unit 10	3				9	1		1		[illegible]				1				1				1								19
92 Unit 11	1				5		1	[illegible]		[illegible]			1	1				3												15
92 Unit 12	6		1	1	20		1	[illegible]		[illegible]				1				6						1		1				49
92 Unit 13	3		2		11		1	[illegible]		[illegible]				1								1								27
92 Unit 14	3				[illegible]	1	1	[illegible]		[illegible]	1	1		2		1	1	6		1	1	4	1	1						67
92 Unit 15					1	1				[illegible]																				5
92 Unit 16														1																5
92 Unit 17	3				15			1		[illegible]				2				1										1		26
92 Unit 18	2	1		1	19	1				[illegible]		1		1		1		5		1	2		1							[illegible]
92 Unit 19	1			1	11		1			[illegible]		2				1		1		1										[illegible]
92 Unit 20					2					[illegible]								1												5
92 Unit 21										1																				1
92 Unit 22	6				12		2	1		6		1			1							2								31
92 Unit 23	2		1		13			3	1	3		1		3		1		1							2					31
92 Unit 24	5	1	1		23	1	3	[illegible]		15	1	1		2		1		10		2	5	3					1	1		83
92 Unit 25					1																									1
92A								1										2		1										4
TOTAL	50	2	6	6	253	5	17	68	3	103	2	9	2	26	2	8	1	49	1	10	10	19	3	4	2	1	1	[illegible]	1	666

Table 54. Site 1Pi61. Debitage in Excavation Units (50% Sample).

PROVENIENCE

CATEGORY

Level	Unit	Primary Decortication Flakes							Secondary Decortication Flakes							Bifacial Thinning Flakes								Other Flakes								Amorphous Flakes							Blade-like Flakes				TOTALS
		DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	FC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	OQ-MQ	DC	RC	YC	MC	
	500NWx550NE																																										
1		225		26		42		1	944	7	67		196	1	2	467	7	69		84		1		145		8	5	39		1	2	7		1	4	1			21		9	4	2,386
2		25	1	17		8			80	1	61		29			64		30	6	14	9	2		21		11	15	9	3	1				1	4	1			1				414
	Subtotal	250	1	43		50	-	1	1,024	8	128	-	225	1	2	531	7	99	6	98	9	3	-	166	-	19	20	48	3	2	2	7	-	2	8	2	-	-	22	-	9	4	2,800
	500NWx510NE																																										
1		195		11		50			856	7	55		150			521	1	17	2	89	3	4		192	1	14	19	61				1	1	2	4	1	1	2	18	1	1		2,280
2		83		11		13			304		30		52			119		23	7	29				72		6	14	12		1				1	2				7			2	788
3		24		4		4			121		8		12			80		14	7	23			1	20	1		7	6			1								4		1		338
	Subtotal	302	-	26	-	67	-	-	1,281	7	93	-	214	-	-	720	1	54	16	141	3	4	1	284	2	20	40	79	-	1	1	1	1	3	6	1	1	2	29	1	2	2	3,406
	510NWx510NE																																										
1		37		4		1			165	1	4		31			100		9		15				37		2	2					1				1							410
2		114	1	6		21			340	3	5		55			224	1	11	1	38	1			59		2	5	20				1						2	6				916
3		58		5		12			261	1	15		54			135	1	11	2	19	1			47	1	1	3	20				1				1		1	5			1	656
4		65		9		11			176	4	16		42			131	2	5	3	21		1		36		1	8	10	1		1				1								544
5		36	2	1		7			201	2	8		20			92		12	4	18				18		2	5	8	1					2	1	1			2				443
6		12			2	4	1		70		9		9			38		3		8		2		12			1	3		1									2				177
7		19		2	2				96	1	8		25			31	1	2	2	10	1			12	1	1	3	3						1	2	1		1	4				229
8		31		3					82	3	3		13			39		3	1	6				20			1												5				210
9		5		1		1			25	1	3		6			14		2		3				7			1		1														70
	Subtotal	377	3	31	4	57	1	-	1,416	16	71	-	255	-	-	804	5	58	13	138	3	3	-	248	2	9	29	64	3	1	1	3	-	3	4	4	-	4	24	-	-	1	3,655
	445NWx510NE																																										
1 & 2	Subtotal	178	2	14	-	42	-	-	868	10	34	-	194	-	1	382	4	29	8	126	2	-	-	127	-	10	11	29	1	-	1	1	1	1	-	3	-	-	6	-	1	4	2,090
	500NWx430NE																																										
1		293	4	11		40			963	12	20		136			517		27	1	82	2			124		7	2	22	3		2	2			2	1	1	1	23			10	2,308
2		65		10		10			243	2	26	52		1		132		22	3	19	2			39		6	5	3						1		1		2	4		1		649
	Subtotal	358	4	21	-	50	-	-	1,206	14	46	52	136	1	-	649	-	49	4	101	4	-	-	163	-	13	7	25	3	-	2	2	-	1	2	2	1	3	27	-	1	10	2,957
	TOTAL	1,465	10	135	4	266	1	1	5,795	55	372	52	1,024	2	3	3,086	17	289	47	604	21	10	1	988	4	71	107	245	10	4	7	14	2	10	20	12	2	9	108	1	13	21	14,908

Table 55. Site 1Pi61. Debitage in Features.

PROVENIENCE	CATEGORY																									
	Primary Decortication Flakes								Secondary Decortication Flakes									Bifacial Thinning Flakes								
Feature	DC	RC	YC	TQ	MC	AG	OE	OQ-MQ	DC	RC	YC	TQ	MC	AG	OE	PC-BC	OQ-MQ	DC	RC	YC	TQ	MC	AG	OE	PC-BC	OQ-MQ
1									6			1						2				1				
2	10				1				90	6	13							56	2	5	4	12		1	1	
3	45				10				172		2		32					118	1	5		26				
4					1				25				7				1	19		3	1	6				
6(Burial 1)	19		2		6				85	2	8		13					43	1	6	2	3	1			
7(Burial 2)	5				1				52	1	2		9					23		2		6				
8									1									2								
9									1																	
10									5									1		1		2				
11													1						1							
12(Burial 37)	3		1						24				4				1	10				2				
13																						1				
14	9	2	6		7				60	2	26		25					30	3	9	1	9				
15	80	2	15		27				399	33	23		104					150	14	7	3	26				
16	3				1				9				2					3				1				
18	18		2		8				58		9		37					29		9		9				
19	13		2		3				70		3		5					33			1	3				
20(Burial 28)	97	1	4		20				326	1	5		53					191	2	3	1	34				
21	76	1	7		10				343	11	15		76					214	5	5	12	30			1	
22	57	6	4		10			2	261	23	12		91					115	19	12	1	25			1	
23									23	2	3		1					5	1	1		6				
25	163	4	20		30				740	4	19		91					462		7	3	56			3	
26	8	1	4		4				48		18		13	1				12		5		10				
27	89	1	63		32				287	5	97		150				2	161	3	57	7	56		5		
30	51		4		11				225		10		68					103		9	2	33		1		
31	51		15		11				283	3	34		57					111		43	2	23		2		
32A	20		1	1		2			166	4	18		33					98	1	5	1	14				
32B	3		3		3				6		5		13					9	1	3	2	7				
33	4								18		1		1					17		3		3				
34	19		2		6				103		8		23				1	42	2		2	13				
35	1								4									1				2				
36	75		2	1	11				348	2	3		36				2	223	1	4		26			1	
37	3				2				55		3		7					11			1	2			2	
38(Burial 34)	69	2			13				333	5	4		57					170	2	9		32		1		
39(Burial 33)	29				10				100		4		16					57		2	1	9				
40(Burial 32)	93		3		17				348		14		49				1	195	4	15	1	38				
41(Burial 35)	29		2		16				178	3	12		56					112	1	14		21		2		
43	6								30	2			8					16				5				
44	70		2		18				365		7		66					234		13		49				
45	3		1		2				18		1		8					16	1	1		3				
46	31		9		13				139	14	20							67	3	20	3	26		2		1
49(Burial 3)	5		1		1				41	1	1		10					19				9				
50	14		1		5				55		2		16					37				9		1		
51	29		8		5				136		3		26					70		16	2	12				
52(Burial 36)	11				2				41		1		5					20		1		5				
53(Burial 38)									6				1					2				1				
54	46		5		12				263	3	20		40				1	146		12	1	21			1	
55	54		8		10				241	2	3		36				1	105		9		15				1
56	7				4				44				8					32		2	2	1			1	
57	67	1	1		11				273	2	3	1	28					113		1		13				
58	4				1				37	2	2		12					23	3	2		4				
60	1		1						8				3													
61	9		2		3				24	1	8		3					26		1		5				
62	29		1		4				136		6		15					67		1	2	8				
63	38	3	6		8				168	2	19		38				1	89		11	3	17				
64	5								121	1			3					5								
65	32		8		8				146	7	8		26					71		6	1	23				
66	37		11		5				149	1	29	1	37					93		20	5	9			2	
69	52	2	3		8				313	13	20		76	1				80	3	12	5	34		2		
71	1								11		1		6					11		1	1	3				
72	2								17				7					11	1	2		8		1		
73	29	1			6				126	1	5		42					51	2	5	2	10				
74	97	1	8		24				441	9	37		118					164	3	14	3	51		2	2	
75	3		3						17		8		6					6	1	10		5				1
76	63	1	1		4				319	3	6		41					195	2	8	2	25		1		
77	20		1		5				140	5	2		24	1				97	1	9		28				
78(Burial 41)	3		1		3				14		1		3					10			1	6		1		
79	19	2	4		4		1		72	6	42	1	28	1				71	5	11		11		1	2	
81	2								9				4					5				1				
82	7		1						28	1	8		2					17	1	3	1	5				
84	6				6				43		1		8					16				4				
85	4		2						33	4			15					11		2	2	1				
86	5	1	3		2		1		30		10		14					22		2		7			2	
87	2		1						7				8					2		1		1				
88	5				2				50	1			9					22				3				
89	1		1						7									3								
90	3		1						15		1							2				2				
91	25				4				136	1	2							40			1	12				
93	225		9		22				983		21		92					495		29	6	64		3		1

PROVENIENCE	CATEGORY																								
	Other Flakes									Amorphous Flakes								Blade-like Flakes							
Feature	DC	RC	YC	TQ	MC	AG	OE	PC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	PC-BC	OQ-MQ	DC	RC	YC	TQ	MC	OE	PC-BC	TOTALS
1																									10
2	11	1	1					1										7							216
3	51		1		9									1				2							475
4	1				1							1						2							68
6(Burial 1)	18		4	6								1						2				1			223
7(Burial 2)	7				1					1								1							111
8																									3
9					1																				2
10																									9
11																									2
12(Burial 37)	4																	2							51
13					1																				2
14	12	1	6	5						1		2						1	1			1			219
15	76	7	5	4	15					2				2				10				2			1,006
16	1									1															21
18	18				9					2			1					1				1			211
19	1				8																				142
20(Burial 28)	55		5	1	12							1						8				1			821
21	83	5	4	15	12				1	4								11	2			4		1	948
22	87	6	5	6	19													7				1			770
23	5				5																				52
25	122		3	2	46			1		3		1		4				9		1		3			1,787
26	10		1		5							1													141
27	80		33	28	40		1	2		1		2	1					6		1		3			1,213
30	66			5	18			1		1								1							609
31	48		13	3	19	4				4								1							727
32A	24		1	1	6					2		1						6							405
32B	3		1	5	3																				67
33	2				1												1	1							52
34	13	1	6	5	13																				259
35					1																				9
36	70			3	11				1									8				1			819
37	4																	3							93
38(Burial 34)	70			2	12					1			1					19				4			806
39(Burial 33)	24		1	3	9				1									7				1			274
40(Burial 32)	47		2	6	22			1	1	1			1					14				3			876
41(Burial 35)	30		5	2	8		1	1	1	1								12				2		1	510
43	4																	4							75
44	58			1	17													21					1		932
45	2		1		1																	1			59
46	29		4	3	11		1							1				2		2		1			401
49(Burial 3)	3			1																					92
50	10				1													1				1			153
51	32		2	1	8								1	1				4							357
52(Burial 36)	5			1	1													1							94
53(Burial 38)																		1							11
54	29		2	4	18		1							1				5				1			632
55	26		2	1	3				1				1	1				2							522
56	6		1		3												1	1							113
57	42		2		15				1								1	4				2			581
58	3																					1			94
60	1																	1							15
61	6		2	4	3																				97
62	16			1	2													6							294
63	25		5		2									3				9		2					449
64																									135
65	16	1	3	1	11													4				2			374
66	29	2	4	8	7			1		5	1		2	1		1		1			1	6			468
69	61	3	1	3	25								1					5	1	8		1			733
71																									35
72					2													1							52
73	22		1	4	4		1		1									1							314
74	69		4	8	18		4		3	1				2			2	10		3		1			1,099
75	3		1		1																				65
76	53		3	2	9													3				1			742
77	10				2				1									9				1			356
78(Burial 41)	2		1	1	2																				49
79	12		2	1	5		1			1		1					1	4	1			2			312
81																		2							23
82	10			1	1							1													87
84	5			1	3		1																		94
85	6						1																		81
86	3			1	8																				112
87	1				1																				24
88	1			4														2							99
89	2			1																					15
90	2																	1							31
91	17			2	8							1						2							266
93	101		7	5	28		1		1	1			1				1	15							2,111

Table 55. Site 1Pi61. Debitage in Features (Continued).

PROVENIENCE / CATEGORY

Feature	Primary Decortication Flakes DC	RC	YC	TQ	HC	AG	OE	OQ-HQ	Secondary Decortication Flakes DC	RC	YC	TQ	HC	AG	OE	PC-BC	OQ-HQ	Bifacial Thinning Flakes DC	RC	YC	TQ	HC	AG	OE	PC-BC	OQ-HQ
94(Burials 42,43,44)	13				2				117		17		18					52		1	1	6			1	
95	61		6		6				369	2	8		39		1			179	1	10	1	17			2	
95(Zone A)	9	3			2				94		3		13					48		2		6				
95(Zone B)	6								42		1		12					13	2		1	1				
95(Zone C)	17	2			1				77	1	3		9					36		3		6				
96									4																	
97	73		3		16				422		6		73					236	3	3	5	25			2	
98(Burial 46)	171		4		27				536	1	15	1	98					283	2	2	4	48			1	
99	1		1						5				2					2								
100(Burial 49)	18		4						76	1	2		10					40		2		4				
101(Burial 48)	54		5		9				191		3		30					85		2	6	18				
102	8				7				74	1	2		21					32	1			14			1	
103(Burial 50)	7								10				2					7				1				
104	2		1						9		1		1					2								
105	65		3		4				367	1	14		17					261		4	1	13				
106									9		1		1							1						
107	41		1		2				126	1	2		4					79		1		12				
108	30	1	4		8				141		3		22					67				10				
109	45		2		5				242		3		27					118			1	10				
111(Burial 51)	12				3				38		1		10					25		2	2	6				
112									9				5					3				2				
113	6		2						15		1		2					4			1	4				
114	5				1				16				2					8				1				
115(Burial 52)	1								6				3					2				1				
116	4				1				26	1			4					15				2				
117	58		6		5				222	1	16		20					158	1	12	3	8			3	
119(Burial 54)	6				1				41	1			12					14				2				
120	27				6				120	3	5		24					62		7		18		3		
122	169		15		87				625	12	24		375					245	3	29		79		1		
123(Burial 55)	4								49		1		5					26			1	3				
124(Burial 56)	6		3						51		2		7		1	1		28		3		9			3	1
125	4								40		1		7					13				2				
126	9		4		8				73	1	4		15					25		3	1	7				
127	2				1				5		1		2					4				1				
128	36	1	8		23		2	1	133	2	38		47		1			50	3	16	14	36		9	2	
129(Burial 57)	2				1				15		1		3					6		4	1	1				
130(Burial 58)	37				9				121		4		34		1			56		1		7		1		2
131(Burial 61A & B)	23	1	5		2		1		172	11	9		51		2			62	6	14	1	15		3		
132(Burial 59)	23		4		3				90		6		27					47		5		17				
133(Burial 60)	22		1		4				104		10		33				1	54		10		16		2		
134	9								29		1		4					9		1	1	1				
135	18		3		3				94		12		36					44		10	5	19				
136	5		1		5				23		6		16				1	14		8	2	12		2		
137	2				1				10		1		2					8				2				
138	93		6		19			1	334	1	11		102					191		14	5	58		5	1	
139(Burial 62)	20	1			7				109	3	26		17					49		6	7	15		2		
140	2		2						10		2		2					4		1						
141(Burial 63)	219		19		47		1		958	20	36		121	1	4			530	9	46	9	133		9	3	
142	19		9		5				74	3	8		35					52		11	2	7				
143	1	2			2				20		2		5					16			2	11	1	1		
144	1		4		3				10			1	3					11		3	1	5			7	
145	2				1								4					4			1	2			1	
146	3				2				4				3					2		1						
147	5								20		1		1					3			1	1				
148											1		3					3		1	1			1		
149											1		1									1				
150(Burial 64)	4	1	1		5				60	1	2		9					25		2		3				
151(Burial 65)					1				8				2					7			1	3				
152			1						17		6		5					11		2	1	19				1
153	150		9		37				607	4	27		130		1			342	2	25	15	78		1	3	
154(Burial 66)	3				1				20		4		5					15	1	3		3				
155					2				8		2		1					4	3	1	2	2				
156(Burial 68)	5		1		2				39		2		6					13		1	1	1		1		
157(Burial 67)	12				4				63	1	1		16					26		3	5	7			1	
158(Burial 71)	14		1		8				81	4	9		23					38		6		8		1		
159										2											1				1	
160(Burial 70)	8		3		1				45		4		15					27		7		10				
161	3		2						5		1		3					9		3	1	5				
162(Burial 69)	9		1						48		1		9					27		1		3				
163	12		2		6				60				7					25			1	2		1		
164	4		2		1				37									29		3		2				
165(Burial 73)	11		1		5				77	1			15					22		3		7				
166	109		7		8			3	423		16		74					235		24		27				2
167	4		1		4				22		1		4					8		1						
168	4		4						19		4		6					5		1		1				
171			1					1	5		2		2					1				1				
172	3	1	4		3				4		7		1				1	9		5		5		1	1	
173				1																						
174	6				3				27		2		13					21		3		7		1		
175(Burial 74)									6		2		3					4		1		2				
176(Burial 75)										1			1					2				2				
177(Burial 76)	1								2											1						

Feature	Other Flakes DC	RC	YC	TQ	HC	AG	OE	PC-BC	OQ-HQ	Amorphous Flakes DC	RC	YC	TQ	HC	OE	PC-BC	OQ-HQ	Bladelike Flakes DC	RC	YC	TQ	HC	OE	PC-BC	TOTALS
94(Burials 42,43,44)	7			7														2				1			235
95	68		3	7	12					3				1				6				3			805
95(Zone A)	13				1									1				1		1					196
95(Zone B)	1											1	1												81
95(Zone C)	13			3										1				2							174
96																									4
97	47	2	4	6	10		5			4		1						7				1			950
98(Burial 46)	111		5	7	4					1		5	7	4				10							1,347
99																									11
100(Burial 49)	16			1	2								2					4							182
101(Burial 48)	31		1	18	10					2								5							470
102	3				3												1								168
103(Burial 50)	1																								28
104	1																								17
105	73		1	1	3					1				2				5							836
106	1												1												14
107	6		1		1							1	2				1	3							284
108	23				6									1			1	2							319
109	25		2		1													7							488
111(Burial 51)	12		1	2	1																	1			116
112																									19
113	1		1		1													1							39
114																									33
115(Burial 52)																									13
116	4				1																				58
117	44	2	6	4	5				1				1	4				13		1					594
119(Burial 54)	2																								79
120	20		3	7	10					3								4							322
122	84		13	4	28		1	3		3		1	3	4				26	2	2		9			1,847
123(Burial 55)	3				2													2							96
124(Burial 56)	8		2	3	2							1					1	2							134
125																									67
126	15		2									1						3							171
127							1																		17
128	32		11	38	11		6	1	1	1			5	1				1				1			531
129(Burial 57)	1																								35
130(Burial 58)	40		1	1	11		2			3								6		1					338
131(Burial 61A & B)	10		2	4	6		3	2										2				2			409
132(Burial 59)	15		1	2					1									3		1					245
133(Burial 60)	22		4	1	6		1		1	2												1			295
134	4			2	5													1							67
135	26		8	13	12								2	3				2				1			311
136	3		4	7	10								1									1			121
137	4								1	1												1			33
138	86		7	6	24		4		1					1	1		1	6				1			979
139(Burial 62)	13		5	8	6							1						2							297
140	5		1																						29
141(Burial 63)	153	1	15	23	62			1		1		2		1	1		1	5		1		1	1		2,434
142	90		3	2	2					1				2								10			335
143	3	1	1		2		2			1															73
144	7			3	2					1			2												64
145	2			2									1												20
146	1		2	1			1																		20
147	5				1																				38
148	2		1																						13
149																									3
150(Burial 64)	12		1	1	10								1					1							139
151(Burial 65)	1																								23
152	6		1	4	2		3					1	1				1	3		1		1			87
153	145		15	51	43		1		2	1		2	1	1			1	13				11		1	1,719
154(Burial 66)	4																								59
155	3																								28
156(Burial 68)	8		1	1	4		13																		99
157(Burial 67)			1	1			1			14			9	8											173
158(Burial 71)	13			1	7		1											1							214
159																									4
160(Burial 70)	7			4	4				1								1	3		1					141
161	2		1	2	2			1						1											41
162(Burial 69)	7			1	3																				110
163	13			1	3													1							134
164	16		1	1									2					2							100
165(Burial 73)	7				8																				157
166	117		7		15													8							1,075
167	2				1																	1			49
168	3		2		1																				50
171														1											14
172	5				2			1	5						1		5								64
173				1																					2
174	8		1	6	6													2				1			107
175(Burial 74)					2																				20
176(Burial 75)																									6
177(Burial 76)																									4

Table 55. Site 1Pi61. Debitage in Features (Continued).

PROVENIENCE	CATEGORY																																																		
	Primary Decortication Flakes								Secondary Decortication Flakes									Biface Thinning Flakes									Other Flakes									Amorphous Flakes								Bladelike Flakes							
Feature	DC	BC	YC	TQ	MC	AC	OE	QQ-MQ	DC	BC	YC	TQ	MC	AC	OE	FC-BC	QQ-MQ	DC	BC	YC	TQ	MC	AC	OE	FC-BC	QQ-MQ	DC	BC	YC	TQ	MC	AC	OE	FC-BC	QQ-MQ	DC	BC	YC	TQ	MC	OE	FC-BC	QQ-MQ	DC	BC	YC	TQ	MC	OE	FC-BC	TOTALS
178(Burial 77)	1								8				3					1	1	1	1	5									1																				22
179(Burial 78)	24	1	1		8				166	5	14		49				1	91	3	11	6	26					17		4	10	9							2		1				4							453
180(Burial 79)	28		3		6				130		14		33					75	1	12		12					14			4	3												1	1				3			340
181	3		4		3				21		7		17					17	3	3		5					3		1	3	1																				91
182	12				4				49	1			16					30			1	7					9		1	2	3								1					3				1			140
183	1								6				2					4							1																										14
184	15		2		7				138	1	7		43					54		4	2	13		1			27		1	3	11													1		1		2			333
185									7		4								1	2		1																1													16
187	18		4		5				79	2	4		25					18	2	4	2	9			1		12		2		3		1						1					2							194
188									1				2					2						2			1			6	1		1																		16
189(Burial 80)	16		1						62		3		12					34		6		3					17			3	2						1							3							163
190	4	1	1		2		1		18		6		9					10	1	2	2	5			2		5	3	4	5	11			1	1		1	1		1	1			1							99
191	1				1				9									6				1									1												1								20
192											2																1			1																					4
193 & 194	3				6				10				5					14		2	2	3		1			4	1	2	6	2												1	1							64
195	3				2				8				3					5																																	21
196	5		3		1				26	1			6					15	1	2		4						1	1	1														1							68
197					1				2				1							1	1			1			2				1																				10
198	1								3		3							2				5									1																				15
199		1							1				2								1	1																													6
200									9	2			1					3				2																													17
201	2				1				25		1		5					9			4	3					10			6	3													1				1			71
202	9				2				49				8					28			1	3					15		1	3	2													2							123
203	1		1						4		2		2					4		2		1					2				1																	1			21
204	25		5						114		6		30					37	1	3	3	11		2			15			10	4		1			2								3							272
205	1								1				2					1																																	5
206	11				6		1	1	18		7		7					10		7	5	6					5		3	20	14		1			2			1	1	1										127
207									1	1								1													1																				4
208	4		2						56	1	1		16					40	1	1	1	6					5		1	1	1															1					138
209	22		1		3		1		70				9					42		2	1	6					21		4	1	2		2																		187
210(Burial 83)	27				5				150	1	6		37					69		1	1	4					12		2	2	8			1						1				3							330
211(Burial 82)	60		3		20		1		431	2	44		87					193	2	3	3	44		2	4	1	69		10	3	18								7				3	8		1		4			1,022
212	192		12		42				944	8	38		165					524	3	29	8	88			2		196	1	15	11	31			2		3		2	8	1				17		1		3			2,346
213	15		1		5			1	120	2	8		30			2		38	1	12		18			2		14		6	5	2					1			1					3				1			288
214	4				1				48		5		13					26		2							3				2													1	1						106
215	3								2									6				2																													13
216	42		7		9				217		5		50					120		2		16		1			51		3	1	11												1	2				1			539
217	7		1		3				52		2		4					36				7					6			4	3									1				2							128
218(Burial 85)	15				6				82		2		23					46	1	1	3	12					2		3		4					1				2									1		204
219(Burial 84)	3								58		5		9					25		1		7					4			1	2													1		1					117
220	4	1	1		1				26	4	1		7					10		1	5	4					5	1	1	13	1																				86
221					1				14				7					3		1		3					2				1								1												33
222	13		3		6				67		12		30					30	1	6		12					21	2		2	3		1											1		1					211
223																		1		1		1					1		1																						5
223A					1				2		4		4					6		2				3			1						2		1					1											27
223B					1				2		1		1					2			2						7			3																					19
224					1				4		3		3					1									1		1				1		1																16
225(Burial 86)	1								4				4					6									2																								17
226									4		1							1																																	6
227	1				3				48		1		15					8				12			1		5			2	5													1				2			104
228	37		8		11				159	4	7		42					60		7	3	13			1		41		4	6	18													5				3			429
229	8				1				12		2		3					9			3	2					3			4	2		1																		50
230	41		3		7				182		5		33					105		4		17					28	1	3		6			1		1		1		1				3							444
231(Burial 11)	2				3				20				4					3		2							17			1																					52
233(Burial 15)									6		1		2					1	1		1	2								1	1		2											1							19
235(Burial 16)	3				4				59				19					26		2	1	8					4				1								1												128
236(Burial 17)	6				1				17				11					15		1		9					4				2													1							67
240(Burial 21)					1				3		1		1					2																																	8
241(Burial 22)	1				1				4				2					6				1								2																					17
242(Burial 23)	1		1						10		1		5					4		2		3									1																				28
243(Burial 24)	3		1						25	2	5		2					10		2		4					4		1	2					1																62
244(Burial 25)	7								29		2		5					14			2	7					3			3	2																				74
245(Burial 26)	6		1						43		5		1					20		1		3					2			1														1							85
246(Burial 27)	4				2				25		1	1	3					12		2		1					10			1	1																	2			65
247(Burial 31)	2		2		2				34		2		15					9	1	3	1	7					1			1	2				1													1			84
(Burial 4)	1								6				2					3				2					1																								15
(Burial 5)									6		1							4	1			1					1																								14
(Burial 6)	2				2				34		3		8					16		1		4					2				1																				73
(Burial 8)	1								11	1	2		1					8	1	1											2																				28
(Burial 13)			1										1					3							1				3		2																				11
(Burial 14)					1				10		1		2					6				7					2				3																				27
(Burial 30)	4		1						20		1		7					12		1	1	1					7		1	4	2																				62
TOTAL	4,780	49	497	3	1,100	2	10	10	22,845	308	1,335	7	4,800	1	15	3	15	11,748	155	958	267	2,401	1	83	68	10	4,028	43	366	578	1,118	4	71	22	32	86	3	38	73	63	5	1	28	503	8	32	1	123	3	3	58,693

Table 56. Site 1Pi61. Flaked Stone Tools in Excavation Units (50% Sample).

PROVENIENCE		CATEGORY																																
Level	Unit	Cobble Scrapers	Flake Scrapers	Heat Spall Scraper	Cobble Knives	Heat Spall Knives	Cobble Scraper/Knives	Hafted Drills	Other Drills	Blanks	Arrow Point Preforms	Perforators	Reamer	Gouge-Chisel-Wedge	Choppers	Unidentifiable Bifaces	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Perforators	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Heat Spalls	Other Knives/ Bifaces	Other Scraper/ Biface	Microliths	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	TOTALS
	645N/510E																																	
1					1DC	1DC				1DC		1DC			2YC	10DC		1DC,2YC	1DC		1DC	1MC	263DC,7BC,5YC,52MC		1DC	64DC,3MC				2YC		1DC		420
	500N/430E																																	
1		1DC,1MC			3DC,1MC		1RC	1YC					1DC			20DC,1MC		1DC		1DC,1MC		1DC,1MC	40DC,1YC,5MC	2DC	1DC	4DC	2DC		1DC,1YC	2DC,2MC			1MC	97
2																			1DC		2DC	1CC	6DC	1YC		1DC	3DC,1MC			2DC,1YC				19
	500N/510E																																	
1		2DC			3DC,2YC	2DC	1DC				1DC	1DC		1DC	1YC	12DC,1TQ,2MC			2DC				47DC,1YC,4MC	1DC		15DC			1DC			1DC		101
2					2DC,1YC,2MC						1DC	1DC				4DC,1YC					1DC	1OE	19DC,2YC,6MC			8DC	3DC,1PC,1MC		1DC	2MC				66
3																1DC,1TQ	1YC		2DC	1DC,3YC			1DC,1MC,2PC			1DC				1DC,1YC				25
	500N/550E																																	
1			2DC		3DC,1RC,4MC	3DC	1DC			1DC,1RC	2DC	2DC,1MC				15DC,2MC					2DC	1DC	61DC,3MC		1DC	9DC	1YC			1YC	1DC	1DC		119
2		1DC			1RC											1YC			1DC				1DC,2YC				1DC							8
	510N/510E																																	
1					1MC					1DC									1MC		1DC		5DC,1MC			1DC						1DC		12
2					3DC,1MC		1RC	1DC				2PC			1DC	11DC,1YC	1DC,1YC		1MC		1DC		9DC,1YC,1MC			3DC	1MC							40
3					1DC	1DC	1DC				1DC	1DC				1DC,2PC	1YC					1DC	8DC,1YC			1DC,1MC	1MC	1DC						23
4				1YC		1DC					1DC					4DC,2YC							6DC,1YC,1MC				1YC				1DC			17
5		1DC			1DC	1DC					1MC					1DC							1DC			1DC	1YC							8
6					1DC				1OE,1CC		1DC					1DC																		5
7																														1MC		1DC	1YC	3
8																1MC							3DC,1OE			1MC								15
9																1DC,1MC																		2
TOTAL		6	2	1	37	9	5	2	11	6	8	9	1	1	4	97	4	4	9	5	8	7	566	4	3	113	17	1	4	15	2	5	2	[illegible]

Table 57. Site 1Pi161. Flaked Stone Tools In Features.

PROVENIENCE

Feature	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Cobble Scraper/Knives	Flake Scraper/Knives	Heat Spall Scraper/Knives	Hafted Drills	Other Drills	Drill Fragments	Blanks	Arrowpoint Preforms	Projectile Point Preforms	Perforators	[illegible]	[illegible]	
2																			
3				1MC															
4				1DC					[illegible]										
6				1M[illegible]						[illegible]				[illegible]					
7																			
10																			
12																[illegible]			
13																			
14				[illegible]														[illegible]	
15	1DC			4DC,1R[illegible],2MC		[illegible]							1DC					[illegible]	
16																			
17A																			
17B																			
17(Structure 1)																			
Unit 1																			
Unit 2																			
Unit 3																			
Unit 4																			
East Cross Section																			
West Cross Section																			
18				1MC									1[illegible]						
19				1DC								[illegible]							
20				1DC,1MC			1DC,1YC,1MC			1DC				1DC	1M[illegible]			[illegible]	[illegible]
21				1DC								1DC,1YC					[illegible]		
22				1DC			1MC					1YC				[illegible]	[illegible]		
23																			
25				1YC								1MC	4DC	3DC		1DC			
26				1YC															
27					1MC					2DC		1DC	1DC		1DC			3DC,1YC	
28(Structure 2)																			
South Quad							1DC												
East Quad	1MC			1DC,1YC						1DC,1OE									
West Quad			1DC													1DC			
29(Structure 3)																			
29A																			
29A(Cross Section)				1DC					1DC										
29C																			
Wall Trench 1				1MC															
Wall Trench 2																			
Unit 1																			
Unit 3																			
Unit 6																			
Unit 7																			
Unit 8																			
Unit 9																			
Unit 10																			
Unit 12																			
Unit 13							1DC												
Unit 14		1MC																	
Unit 16																			
Unit 17																			
Unit 18																			
Unit 19																			
Unit 20																			
Unit 21																			
Unit 23				1DC															
Unit 24																			
Unit 25																			
Unit 26																			
Unit 28																			
Unit 30																			
Unit 31																			
Unit 32																			
Unit 35																			
30			1DC	1DC									1DC						
31				1DC,1MC			[illegible],1RC										[illegible]	[illegible]	
32A	1[illegible]			2MC															
32B																			
33																			
34															1MC				
35																			
36				[illegible]															
37													[illegible]						
38	1DC,1MC			1M[illegible]			[illegible]			[illegible]	[illegible]	[illegible]							
39	[illegible]			2D[illegible]										[illegible]					
40	1R[illegible]			1M[illegible]		[illegible]										[illegible]			
41				1Y[illegible]		[illegible]							[illegible]						
44				[illegible]	[illegible]									[illegible]					
45																			
46				1M[illegible]								[illegible]		[illegible]					
47																			
49						[illegible]													
50				[illegible]															
51			1DC	1D[illegible]	2D[illegible]	[illegible]													
52																			
53																			
54							[illegible]	[illegible]					[illegible]	[illegible]					

									CATEGORY Uniface														
Preforms	Projectile Point Preforms	Perforators	Reamers	Gouge-Chisel-Wedges	Choppers	Notched Flake Spokeshave	Adze	Unidentifiable Bifaces	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Flake Scraper/Knife	Blanks	Perforators	Graver	Gouge-Chisel-Wedges	Choppers	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades
																						6DC,1YC,1RC	1MC
								4DC													1MC	1DC,1YC	
								1DC												1MC		2DC	
DC																						1DC	
								1MC															
		1TQ																				8DC,2MC	
								1MC															
				1DC				3DC,1MC									2DC					6DC	
				1MC	1DC					1MC					1MC		4DC				1RC	14DC	
								9DC															
																						3DC	
																						3DC	
								3DC														4DC,1YC	
																					1DC	1DC	
								2DC														4DC	
																						3DC	
								1DC,1FC														2DC,1YC	
								2DC														3DC	
								1DC	1YC													3DC,1YC	
								3DC														1MC	
DC	1MC			1YC	1DC,1YC			4DC,1RC,2MC														12DC	
			1DC					4DC,1TQ			1DC	1DC					3DC					37DC,2YC,2MC	
		1DC	1YC					2DC,1RC,1TQ,1MC			1DC		1DC				1DC					1DC,1YC	
																						1DC,1MC	
DC		1DC					1MC	13DC	1DC		1DC											36DC,2YC,1TQ,1MC	
								2DC,1RC															
	1DC			3DC,1YC				5DC,1RC,2MC	1DC,1YC		1DC	1MC					7DC				2DC,1YC	12DC,3YC,2MC	
					1MC																		
																						4DC	
								1DC														13DC,1RC,1YC	
		1DC																				1DC	
																	1DC					6DC,2MC	
																						14DC	
																						2DC	
								1DC														5DC	
																						2DC	
																						5DC	
								1DC														2DC	
																						1MC	
																						1DC	
																						1DC	
								1DC														3DC	
																						4DC	
																						1DC,1MC	
																						5DC	
								1DC														2DC	
																						2DC,1YC	
																						4DC	
																						1DC	
																						2DC	
								1MC														1DC	
																						2DC	
								1DC														3DC,1MC	
																			1MC			2DC	
																						4DC	
					1DC			1DC	1DC													6DC	
																			1YC				
																						2DC	
								3DC			2DC											2DC,1MC	
			1DC	1DC				5DC,1RC,1MC			1DC						1DC,2YC		1YC		2DC	7DC,2RC,2YC	
								3DC	[illegible]	1MC												15DC,5MC,1OQ	1DC
								1DC			[illegible]												
								[illegible]															
	1MC				[illegible]			1MC														6DC	
								7DC,1TQ,1OQ,1MC									1DC					[illegible]	
								[illegible]														[illegible]	
					1YC			4DC	[illegible]		1DC											39DC,6MC	
DC								1DC,1MC													1MC	1DC	
		1DC						10DC,1TQ,1MC												2DC		5DC,2MC	1DC
								2DC,1MC														14DC,5MC	1DC,1MC
DC								2DC,1YC,1MC														3DC,1YC	
																	[illegible]					[illegible]	
					1MC			[illegible]										[illegible]				3DC,1YC	
								1DC														[illegible]	
								3DC				1DC					1DC					4DC	
																						5DC,1YC	
								1DC														13DC,1YC,1MC	
																			1YC				
[illegible]								5DC,1TQ,[illegible]	[illegible]			[illegible]										[illegible],2YC,1MC	

Perforators	Graver	Gouge-(Chisel)-Wedges	Choppers	Unidentifiable Unifaces	Cores, Use Modified, and Miscellaneous Tool Forms Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Cores	Utilized Heat Spalls	Other Knife/Bifaces	Other Scraper/Bifaces	Microliths	Opposing Ridge Uniface Cobbles	Splintered Wedges	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	TOTALS
					6DC,1YC,1RC	1MC			3DC		1DC								13
				1MC	1DC,1YC				1DC										9
			1MC		2DC														6
					1DC				1DC										5
																			1
														1YC					1
					8DC,2MC				1DC						1YC				13
																			1
2DC					6DC				1DC										15
4DC				1RC	14DC			1DC	2DC	1DC					1DC,2MC	1DC	2DC,1MC		53
									1DC										1
					3DC														3
					3DC														3
																			-
					4DC,1YC				1DC										9
				1DC	1DC														2
					4DC					2DC									8
					3DC														3
					2DC,1YC					1DC									6
					3DC														5
					3DC,1YC					1DC									9
					1MC				1DC	1DC			1MC						9
					12DC				2DC	2DC,1YC									35
3DC					37DC,2YC,2MC				3DC						1DC	1DC	1DC		61
1DC					1DC,1YC				2DC	2DC,1MC					1DC		1DC		22
					1DC,1MC														2
					36DC,2YC,1TQ,1MC				11DC						1DC,1YC,2MC	2DC,1RC,1YC			85
									1DC								1DC		6
7DC				2DC,1YC	12DC,3YC,2MC			1YC	3DC	3DC,1MC					1DC,4YC,1MC		1DC,1YC		65
																			-
					4DC							1MC							7
					13DC,1RC,1YC				2DC			1YC							24
					1DC				1DC										4
																			-
1DC					6DC,2MC				4DC										13
					14DC				7DC										23
									1DC										1
					2DC				1DC										4
					5DC				1DC										7
					2DC				1DC										3
					5DC														5
					2DC														3
					1MC				1DC										2
					1DC				2DC										3
					1DC														1
					3DC														4
					4DC				3DC										7
					1DC,1MC				1DC										4
																			1
					5DC				1DC										6
					2DC														3
					2DC,1YC														3
					4DC														4
					1DC														1
					2DC														2
					1DC														3
					2DC														2
					3DC,1MC				1DC							1DC			7
		1MC			2DC														3
					4DC														4
					6DC				4DC			1DC							14
		1YC																	1
					2DC				1DC										3
									1DC										1
					2DC,1MC				6DC	1MC					1DC				19
[illegible]DC,2YC		1YC		2DC	7DC,2RC,2YC				4DC	1DC					1DC,1YC,1MC	1DC			39
					15DC,5MC,1OQ	1DC	1DC		[illegible]	1DC									35
									3DC										5
									1DC										2
					6DC										1RC,1MC				11
									1DC										1
1DC					11DC				4DC						1DC				28
					1DC				[illegible]										6
					39DC,6MC				6DC						1YC				68
				1MC	1DC														8
			2DC		5DC,2MC	1DC				1TQ,1R[illegible]					2DC				31
					14DC,5MC	1DC,1MC			[illegible]										33
					3DC,1YC														11
1DC					5DC														6
	1YC				3DC,1YC										1DC,1YC				12
														1YC					1
					5DC														7
1DC					4DC				[illegible]										11
					5DC,1YC		1YC												13
					13DC,1YC,1MC				2DC										18
		1YC																	1
					9DC,2YC,1MC				2DC						1DC,1RC,1YC,1MC				13

(2) (3)

Table 57. Site 1Pi61. Flaked Stone Tools In Features (Continued).

PROVENIENCE Feature	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Cobble Scraper/Knives	Flake Scraper/Knives	Heat Spall Scraper/Knives	Biface Hafted Drills	Other Drills	Drill Fragments	Blanks	Arrow Point Preforms	Projectile Point Preforms	Perforators	Reamers	[illegible]
55				1DC, 1RC												1DC		
56				1DC														
57																		
58			1DC	1DC			1DC		1DC				1DC					
61																		
62				1DC, 1RC														
63				1DC					1DC	1YC	1YC							
66	1DC									1MC								
69	2DC			2DC					1DC			1DC			1DC			
71																		
72																		
73				1DC								1TQ						
74	2YC, 1MC		3DC	5DC	1TQ, 1MC	1DC	1DC			1YC, 1MC	1MC					1DC		
75																		
76																		1YC
77	1YC, 1MC			2DC			1DC											
78																		
79	1DC			1MC										1DC				
81																		
82						1DC												
84				1DC														
85																		
86																		
87																		
88																1DC		
89																		
90																		
91				1DC, 1RC		1DC										1DC		
92 (Structure 4)																		
Unit 1																		
Unit 3																		
Unit 7																		
Unit 8																		
Unit 9																		
Unit 11																		
Unit 12																		
Unit 13	1MC									1DC								
Unit 14																		
Unit 15																1DC		
Unit 17																		
Unit 18			1DC															
Unit 19																		
Unit 22																		
Unit 23				1DC														
Unit 24	1RC			1DC														
Unit 25																		
93						1DC	2DC, 1YC, 1MC		1DC				1DC, 1RC	4DC		1DC		
94																		
95						1DC								1DC			1DC	
95A																		
95B																		
95C																		
96																		
97				1DC, 1MC		1DC						1MC	1DC	1DC				
98				3DC, 2MC		2DC	1DC			1DC								
99														1MC				
100				2DC								1bc						
101				2DC, 1MC		2DC								1DC			1DC	
102			1DC															
103																		
105				1MC		2DC							1TQ					
106																		
107																		
108							1YC			1DC								
109				1YC, 1OQ				1DC						1DC		1DC	1DC	
111						1DC												
112																		
114																		
116	1DC																	
117															1RC	1DC		
119				1YC		1DC												
120																		
122				1DC, 1MC	1DC	9DC				1MC			2DC, 1MC	2DC				
123	1MC			1RC														
124				1DC						1TQ								
125																		
126																		
127				1DC														
128																		
129										1MC								
130																	1YC	
131				2DC, 7MC														
133				1YC	1YC											1YC		
135			1DC			1DC												
136																		

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									CATEGORY															
									Uniface															
Projectile	Projectile Point Preforms	Perforators	Reamers	Gouge-Chisel-Wedges	Choppers	Notched Flake/Spokeshave	Adze	Unidentifiable Bifaces	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Flake Scraper/Knife	Blanks	Perforators	Graver	Gouge-Chisel-Wedges	Chopper	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades	
		1DC						3DC,1MC														8DC		
																						1DC		
								2DC,1MC			1DC						1DC					10DC		
									1YC															
								3DC,1MC									1DC					7DC,1YC		
					1DC,1YC			4DC,2YC	1YC			1YC										9DC		
				2DC				1DC,1BC														6BC,1YC		
	1DC				1RC			2DC,1TQ			1DC			1DC		1DC	7DC					9DC		
											1DC											1DC		
								1TQ														2DC		
											1DC											4DC,1RC		
		1DC			1DC,1MC			5DC									5DC				2DC	31DC,3RC,6MC	1DC	1D
																						1BC,1YC		
				1YC,1DC	1YC,1MC			1BC,1DC													1DC	11BC,3MC		
								6DC,2MC														5DC		
								1DC									1DC					2DC		
								1DC														2DC		
								2DC	1YC													1DC		
								1DC														2DC		
								1MC									1DC					2DC		
					1MC			1MC	1YC													2DC,1YC,2MC		
								1MC									1DC							
		1DC																			1DC	5DC		
																1DC								
																						1BC,1MC		
		1DC			1DC			4DC	1DC													11DC,2YC,1MC		
								1DC														1DC		
								1TQ														1DC		
																						1DC		
								1DC														6BC,1MC		
									1DC															
																	1DC							
																						1DC		
								1MC			1DC													
																						1DC		
		1DC																						
																						2DC		
																						3MC		
																						2DC,1MC		
																						1DC		
									1YC												1DC	1DC		
		1DC		1YC				14DC,2RC,1MC				1MC					2DC,1YC					40DC		
								5DC													1DC	8DC,1YC,4MC		
			1DC					1DC			2DC											20BC,1MC		
								3DC	1DC													10BC,1MC		
								1DC													1RC,1MC	3DC		
								2DC,1YC			1DC											9BC,1YC		
								11DC,1TQ			1MC										1DC,1YC,1MC	46DC,2RC,5MC		
								2DC,1MC									1DC				1MC	11DC		
								2DC														3DC,1YC,1MC		
			1DC					2DC,1MC											1YC			18DC,1YC,3MC	1DC	
								1DC														5BC,2MC		
								1DC														1DC		
								4DC														5DC		
																						1DC		
								2DC														7DC,1RC,1MC		
								3DC,1YC			1MC											3DC		
		1DC	1DC					2DC	1DC										1YC			6DC		
								1MC														9DC,1YC,1MC		
																						2DC,1MC		
																						1DC		
																						2DC		
	1RC	1DC						2DC			1DC											12DC,2YC,1TQ		
																						1DC		
								1DC														7DC,3YC		
					1DC,1YC			9DC,4MC									1DC				1DC,2MC	32DC,2YC,5MC		
								3DC,1RC														2DC		
																	1DC					3DC		
																						2DC		
								1MC																
																						2DC,1YC,1MC		
				1YC				5DC,1MC	1YC															
									1YC													7DC,1YC,2MC		
			1YC					6DC									2DC					16DC,2MC		
								3DC											1YC			14DC,[illegible],3MC		
		1YC						1YC,1MC			1DC								2YC			6DC,1MC		
								1YC,1MC														1YC,1MC		
								1DC														2DC		

						Cores, Use Modified, and Miscellaneous Tool Forms										
Chopper	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Cores	Utilized Heat Spalls	Other Knife/Bifaces	Other Scraper/Bifaces	Microliths	Opposing Ridge Uniface Cobbles	Splintered Wedges	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	TOTALS
		8DC				2DC										17
		1DC														2
		10DC				2DC										17
																5
																1
		7DC, 1YC				2DC							1YC			18
		9DC				3DC						2YC	1YC			29
		6DC, 1YC				1DC						1MC			1YC	16
		9DC				5DC	4DC					1DC		1DC		41
		1DC														2
		2DC														3
		4DC, 1RC														8
	2DC	31DC, 3RC, 6MC	1DC	1DC, 3YC		4DC						1DC				83
		1DC, 1YC														2
	1DC	11DC, 3MC				2DC						1MC				24
		5DC				2DC										20
		2DC				1DC										5
																3
		2DC				1DC										4
		1DC														5
		2DC				1DC						1DC				6
		2DC				1DC						1MC				6
		2DC, 1YC, 2MC		1YC		1DC										10
												2YC				4
	1DC	5DC				2DC										9
																1
		1DC, 1MC														2
		11DC, 2YC, 1MC		1YC		4DC										29
																-
		1DC														2
		1DC														2
		1DC														1
		6DC, 1MC														8
																1
																1
		1DC														1
							1DC									5
		1DC					1DC									2
																1
		2DC														2
		3MC														4
		2DC, 1MC														3
		1DC														1
						1DC										2
	1DC	1DC														5
						1DC										1
		40DC				5DC						1DC, 2YC		2MC		85
	1DC	8DC, 1YC, 4MC				4DC										23
		20DC, 1MC				1DC						1YC	1DC			30
		10DC, 1MC										1DC				16
	1RC, 1MC	3DC														6
		9DC, 1YC				1DC						2YC				12
						1DC										1
	1DC, 1YC, 1MC	46DC, 2RC, 5MC				8DC	1DC									84
	1MC	11DC				5DC	1DC		1YC							32
																1
		3DC, 1YC, 1MC				1DC										11
		18DC, 1YC, 3MC	1DC			3DC	3DC, 1TQ							1MC		42
		5DC, 2MC				3DC										12
		1DC														2
		5DC				4DC										17
		1DC														1
		7DC, 1RC, 1MC				5DC										16
		3DC				5DC						2DC				17
		6DC				1DC						1DC, 1YC		1DC		20
		9DC, 1YC, 1MC				1DC, 1MC										15
		2DC, 1MC														3
		1DC														1
		2DC					1DC									4
		12DC, 2YC, 1TQ				1DC, 1MC							1MC			25
		1DC														3
		7DC, 3YC														11
	1DC, 2MC	32DC, 2YC, 5MC			2MC	2DC, 2MC	1DC, 3MC					3DC, 3MC	1RC, 1TQ	6DC, 1MC		101
		2DC												1MC		9
		3DC				2DC										8
		2DC														2
																1
		2DC, 1YC, 1MC														5
						1DC						1DC	1DC			11
		7DC, 1YC, 2MC				1DC										13
		16DC, 2MC				2DC, 1MC										28
		14DC, 4YC, 3MC				1DC										30
		6DC, 1MC				2DC, 1MC	1MC					1YC				20
		1YC, 1MC				1DC						1YC				8
		2DC														3

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Table 57. Site 1P161. Flaked Stone Tools In Features (Continued).

PROVENIENCE

Feature	Cobble Scrapers	Flake Scrapers	Heat Spall Scrapers	Cobble Knives	Flake Knives	Heat Spall Knives	Cobble Scraper/Knives	Flake Scraper/Knives	Heat Spall Scraper/Knives	Hafted Drills	Other Drills	Drill Fragments	Blanks	Arrow P[illegible] Preforms	Projectile Point Pre[illegible]	Perforators	Reamers	Gouge Chisels Wedges	Choppers	Notched [illegible]
138				3DC		2DC							1NC	1DC		1DC				
139				2DC																
140																				
141	1DC	1DC		5DC, 1YC		4DC	1DC			1TQ			1DC	1DC	2DC, 1BC	1DC				
142																				
143																				
144									1DC			1NC								
147				1DC																
149				1YC																
150						1DC						1NC								
151																				
152																				
153			1DC	1DC		4DC, 1NC				2DC				1BC						
154	1BC																			
155				1DC																
156				1NC																
157				1NC																
158				1DC																
159																				
160				1DC																
161																				
162																				
163																				
164																				
165																				
166																				
171																				
172																				
174																				
175																				
176																				
177																				
178																				
179						1DC				1NC										
180																			1DC, 2NC	
181				1DC									1DC							
182						1DC														
184				1DC																
187				1NC																
188																				
189																				
190																				
191																				
195																				
196																				
197																				
198																				
201																				
202																				
203																				
204																		1YC		
205				1DC																
206																				
208																		1NC		
209																				
210																				
211											1DC									
212				2DC, 1NC		1DC								3DC		2DC				
213	1DC																			
214														1DC						
215																				
216				1DC		2DC														1NC
217																				
218				1DC										2DC						
219				1NC																
220																				
222																				
223A																				
223B				1DC																
224																				
225																				
226																				
227						1DC														
228					1DC		1DC													
229																				
230				4DC			1BC									4DC, 1NC				
231																				
233					1YC													1NC		
235																				
236																				
240																				
241																				
242					1YC								1YC							
244																				
245																				
246			1DC	1DC		1DC														
247				1DC															1YC	
Burial 4																				
Burial 5																				
Burial 6														1DC						
Burial 8																				
Burial 13																				
Burial 14													1DC							
Burial 30																				
TOTAL	23	2	17	124	11	51	23	2	7	22	4	14	26	31	8	23	7	17	23	1

	Perforators	Reamers	Gouge Chisel Wedges	Choppers	Notched Flake Spokeshaves	Adze	Unidentified Bifaces	Cobble Scrapers	Flake Scrapers	Heat Treated Scrapers	Cobble Knives	Flake Knives	Heat Knives	Flake Scrapers	[illegible]	Perforators	[illegible]	Gouge Wedges	Choppers	Unidentified Uniface	Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Cores	Heat Spalls
	1DC						3DC	1DC								1DC					18DC,1YC,2MC				1DC
							1DC,2MC		1YC							1DC					7DC				
								1DC																	
	1DC						10DC,1YC,2MC			5DC,1MC			1DC			1MC				5DC	44DC,2RC,1YC,7MC	2DC,1MC			4DC
							2DC,1YC,3MC			1DC						2DC					2DC,1YC,1MC				
							1DC	1YC										1YC			2DC,1OE				
																					1MC				2DC
													1DC								8DC,1RC				2DC
																					1DC				
							1YC																		
							5DC,1MC									2DC,1MC					57DC,1YC,14MC,1OQ	3DC			13DC
							1DC														1DC				
																					1DC				
							1DC			1DC											2DC,1YC				
							1YC									1MC		1YC			7DC,1MC				
																1DC					3DC				1DC
							2RC																		
							2DC,1YC														6DC,1RC,1MC				2DC
																									1DC
							1RC			1DC											8DC				
							1DC														1DC				2DC
																									1DC
								1YC													8DC				2DC
							7DC,1YC,1MC		1DC	1DC								1DC		1MC	10DC,1YC				2DC
							1BC																		
							1RC																		
																					2DC				
																					1DC				
																					1DC				
																					1DC				
							1DC														1DC				
							2DC			1DC						1MC					5DC				2DC
				1DC,2MC			1DC									1DC,1YC					1DC,1MC				4DC
																					1DC,1YC				1DC
							1DC														2DC,1MC				1DC
																1DC					5DC				
																					8DC				
																					1DC,1YC				
																					1DC				
							1DC,1BC														1YC				
																					1DC				1DC
																					3DC				
																					3DC,1MC				
																		1YC							
							2DC														5DC				
										1DC											7DC				1DC
																					2DC				
			1YC				1DC														3DC				2DC
																					1YC				
			1MC				1DC														7DC				2DC
							2DC,1MC									1DC					5DC,1PC				
							2DC,1MC			2DC											15DC,2MC				1MC
							4DC			2DC	1DC					1YC				1DC	63DC,1RC,1YC,13MC,20E	1DC			5DC
	2DC						9DC,1TQ,3MC			2DC,1MC	2MC										4DC				
																					16DC,1YC,3MC				
																					5DC				
																					6DC,2RC,1MC	1DC			
					1MC		1MC														35DC,5MC				6DC
							1MC				1MC										9DC,2MC				
							1DC									1DC				1DC	14DC,3MC				4DC
							1DC	1DC			1DC										10DC,5MC				1DC
							1MC				1DC										1DC,1RC,1MC				
							1YC														12DC,2YC,2MC				
																					1MC				
										1DC															
							1DC																		
																					2DC				
							2DC,1PC																		
							3DC	1YC		1DC						5DC					8DC,1YC				2DC
							1DC														2DC,1MC				
	4DC,1MC						3DC									1DC					9DC,1MC				4DC
							1DC														6DC				1DC
			1MC																		5DC				
							[illegible]	1MC													13DC				
																					6DC				2DC
								1MC																	1DC
																			1YC		1DC				
																					5DC				1DC
							1TQ														2DC				
							1DC														8DC		1DC		2DC
							2DC			1DC											4DC,1MC				
				1YC				1YC,1MC			1YC										6DC,3MC			1YC	
																					2DC				
																					7DC	2DC			
							1DC														1DC				2DC
										1DC											6DC,1MC				
																					1DC				
							1DC														1MC				
							1MC														10[illegible]		1DC		1DC
8	23	7	17	21	1	1	421	29	4	44	13	1	3	1	2	13	1	13	4	32	1,6?0	17	13	5	289

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				Cores, Use Modified, and Miscellaneous Tool Forms															
Gravers	Gouge/Chisel Wedges	Nippers	Unidentifiable Unifaces	Utilized Flakes	Utilized Blades	Utilized Cobbles	Utilized Cores	Utilized Heat Spall	Other Knife Bifaces	Other Scraper Bifaces	Microliths	Opposing Ridge Uniface Cobbles	Splintered Wedges	Primary Cobble Cores	Secondary Cobble Cores	Secondary Heat Spall Cores	Bipolar Cores	TOTALS
				18DC,1YC,2MC				1DC										35
				7DC														14
																		1
			5DC	44DC,2RC,1YC,7MC	2DC,1MC			4DC						2YC,1MC			1BC	111
				2DC,1YC,1MC										1YC,1MC		1BC		16
	1YC			2DC,1OR					1DC									7
				1MC				2DC										5
																		1
																		1
				8DC,1RC				2DC										14
				1DC														1
														1YC			1BC	3
				57DC,1YC,14MC,1OQ	3DC			13DC						1RC	1BC			110
				1DC														3
				1DC														2
				2DC,1YC														6
	1YC			7DC,1MC					2DC								1MC	15
				3DC				1DC										6
																		2
				6DC,1RC,1MC				2DC							1YC			15
								1DC										1
				9DC														10
				1DC				2DC										4
								1DC										1
				8DC				2DC						1YC				12
	1DC		1MC	10DC,1YC				2DC							1BC	1MC		28
																		1
									2MC									3
				2DC														2
				1DC														1
				1DC														1
				1DC														1
				1DC												1BC		3
				5DC				2DC	1DC					1YC				15
				1DC,1MC				4DC									1YC	13
				1DC,1YC				1DC										5
				2DC,1MC				1DC										6
				5DC														7
				8DC														9
				1DC,1YC														2
				1DC														1
				1YC														3
				1DC				1DC										2
				3DC														3
				3DC,1MC														4
	1YC																	1
																	1YC	1
				5DC														7
				7DC				1DC										9
				2DC														2
				3DC				2DC	1RC					1MC				9
																		1
				1YC								1YC						2
				7DC				2DC										11
				5DC,1YC										1DC				11
				15DC,2MC				1MC										23
			1DC	63DC,1RC,1YC,13MC,2OR	1DC			5DC						1YC,1MC		1BC		99
				4DC										1DC		1BC		33
				16DC,1YC,3MC														21
				5DC														6
				6DC,2RC,1MC	1DC											1BC		11
				35DC,5MC				6DC						1MC		1BC		53
				9DC,2MC												1BC		14
			1DC	14DC,3MC				4DC			1DC			1YC		1DC		30
				13DC,5MC				1DC										20
				1DC,1RC,1MC														5
				12DC,2YC,2MC										1YC				18
				1MC														1
																		1
																		1
																		1
				2DC														2
														1DC				5
				8DC,1YC				2DC	1TQ					4DC,1MC				29
				1DC,1MC														3
				9DC,1MC				4DC	1DC									29
				6DC				1DC										8
				[illegible]														7
				[illegible]										1DC		1DC		14
				4DC				2DC										6
								1DC										2
		1YC		1DC														2
				5DC				[illegible]										8
				2DC														3
				[illegible]		1DC		2DC			1DC					2DC		15
				[illegible]														11
				6DC,9MC			1Y[illegible]											15
				2DC														2
				2DC	2DC													4
				3DC				2DC										7
				6DC,1MC														8
				1DC														1
				[illegible]														3
				[illegible]		1DC		[illegible]										13
1	13	4	12	1,470	17	13	5	289	68	1	6	2	2	86	18	33	6	3,266

Table 58. Site 1Pi61. Ground Stone Tools in Excavation Units (50% Sample).

PROVENIENCE Level	Unit	CATEGORY Mullers	Abraders	Unidentifiable Groundstone	Ground and/or Polished Hematite	TOTALS
	445NW510NE					
1			1SS	1SS,1PW		3
	500NW430NE					
2		1LI		1SS		2
	500NW510NE					
2		1SS		1SS		2
3		1SS		8SS		9
	500NW550NE					
1			2SS	1SS		3
	500NW510NE					
3					1HE	1
9			1SS			1
TOTAL		3	4	13	1	21

PREVIOUS PAGE IS BLANK

Table 59. Site 1Pi161. Ground Stone in Features.

PROVENIENCE Feature	Hammerstone	Anvil Stone	Muller	Metate	Pitted Stone	Comb. Pitted Stone/Muller	Abrader	Hoe	Celt Celt Fragment	Unidentifiable Groundstone	Steatite Bowl Fragments	Sandstone Saw	Comb. Anvilstone/ Muller	Ground and/or Polished Hematite	TOTALS
14							1SS								1
15										1SS					1
16		1SS			1SS					2SS					4
17(Structure 1)															
Unit 3							1SS								1
Unit 4			1SS												1
West Cross Section	1YC														1
18					1LI										1
19								1SS							1
20						1SS	2SS								3
21					1SS										1
26	1Q														1
27	1YC	1SS		1SS											3
32B										1SS					1
34	1YC						1SS								2
37							1SS								1
40	1YC														1
42					1SS		1SS								2
51				1SS											1
54							1SS								1
57										1SS					1
66										1SS					1
68												1SS			1
69							2SS							1SS	3
73										1SS					1
74	1YC						1SS		1**				1SS		4
82							2SS								2
87			1SS		1SS		1SS								3
88					1SS										1
91					1SS										1
92(Structure 4)															
Unit 24											1SS				1
93							1SS			1SS					2
94							2SS								2
95A							1SS								1
95C							1SS								1
97							2SS			1SS					3
103				1SS											1
109	1Q						1SS						1SS		3
120					1SS										1
122							2SS								2
126	1Q														1
131							1SS								1
133				1SS											1
136										2SS					2
141			2SS		1SS		2SS			1LI					6
142							1SS								1
144										2SS					2
146	1Q														1
152		1SS	1SS												2
158							1SS								1
160							1SS								1
161			1SS												1
166							1SS								1
184	1Q		1Q		3SS										5
206	1YC														1
210										1SS					1
211		1Q			2SS										3
212			1Q		1L								1Q		3
214							1SS								1
217	1Q						1SS								2
218	1YC														
223A				1SS											
228			1SS												1
230										1SS					1
TOTAL	13	4	9	5	15	1	33	1	1	16	1	1	3	1	104

E. 1Pi33

Stone materials were recovered from excavations, surface collection and features. Miller II and Miller III components at the site were represented by tools and other materials associated with the Late Miller II Turkey Paw subphase, Early Miller III Vienna subphase, Late Miller III Catfish Bend subphase, and Terminal Miller III-Early Mississippian Gainesville subphase.

The site was used at least three times during the preceramic period. An Early Archaic component is suggested by the Hardaway cluster type Hardaway var. River Bend; a Late Archaic (West Greene) occupation by the types Gary var. Tombigbee, Little Bear Creek var. Gainesville and var. Little Bear Creek.

A Class 81 (Wade var. Wade) point suggests a Wade-related component. Other projectile point clusters and types include Tombigbee Stemmed var. Tombigbee for the Middle Woodland and Collins var. Collins associated with the Late Woodland-Early Mississippian.

Lithic Artifacts

A collection of 49,587 stone artifacts was recovered; most are either from the Miller III or Mississippian components, although some were Late Miller II and Archaic materials.

Concentrations of thermal spalls in shallow basin-shaped depressions, may be heat treating facilities.

Projectile Points. Two hundred eighty projectile points were recovered. Most of these were small triangular points: 62 Class 1 (Madison var. Gainesville type); 36 Class 4 (Hamilton var. Gainesville type); 41 Class 10 (Pickens var. Pickens). Other small triangular points include Classes 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19 and 20. Fourteen other identifiable projectile points were also recovered. The Middle Woodland Tapered Shoulder cluster provides 25 percent of the collection; Wade cluster, 8.3 percent; Little Bear Creek cluster, 41.7 percent; Late Archaic, 16.7 percent; and Hardaway cluster, 8.3 percent.

"Microliths". The 197 microliths (Table 60) include blades, cores, drills and gravers. One hundred twenty-six were recovered from features, pits or burials (89 from Feature 51); 14 were found in excavation units; and 30 from the surface.

Twenty-seven blade cores, 16 blades and 154 microliths in varying stages of manufacture and use are present. Thermal alteration is detectable on 93.9 percent of them.

Of the 27 blade cores 15 are primary (intact) cobble cores, 4 are secondary (sectioned) cobble cores and 8 are heat spall cores. Eleven of have two platforms and one has three platforms; all are bidirectional. Sixteen cores have only a single striking platform.

Table 60. Site 1Pi33. Blades.

Technological - Use Class		
Total Site	N = 197	
Blades	N = 16	
Cores	N = 27	Percent thermally altered = 85.2
All Class I	N = 68	Percent of Classes 1-3 = 44.2
All Class II	N = 38	Percent of Classes 1-3 = 31.2
All Class III	N = 48	Percent of Classes 1-3 = 31.2
Broken Class I	N = 59	Percent of Class 1 = 86.8
Broken Class II	N = 38	Percent of Class 2 = 100
Broken Class III	N = 22	Percent of Class 3 = 46.8
Single Pointed/Broken Drills*	N = 34	Percent of Class 3 = 70.8
Bipointed Drill	N = 5	Percent of Class 3 = 10.4
Single Pointed Chisel-Drill	N = 3	Percent of Class 3 = 6.3
Bipointed Chisel-Drill	N = 4	Percent of Class 3 = 8.3
Drill Fragments	N = 2	Percent of Class 3 = 4.2
Material		
Dark Red Chert		Percent of total collection = 50.3
Red Chert		Percent of total collection = 5.6
Miscellaneous Chert		Percent of total collection = 32.5
Yellow Chert		Percent of total collection = 11.2
Bangor Chert		Percent of total collection = 0.5
Thermally Altered		Percent of total collection = 93.9

* A minimum of 1 transverse bit, possibly 2 is present on these broken drills.

Blades produced by detachment from the various core types are triangular in cross section; a few are flattened and prismatic in appearance. Platform angle averages 74° (measured between the plane tangent to the striking platform and that tangent to the ventral (bulbar) surface). Most show use retouch along the lateral margins and one is worn on the distal transverse edge. Mean length is 27.1 mm, mean width 10.3 mm and thickness 4.3 mm.

The microliths are cylindrical to biconvex cross sectional tools produced by bifacial flaking of blades. Three classes were segregated.

Class I blades have been unifacially (4) or bifacially (64) flaked along part or all of the margin. Widely spaced flake scars occur on one-half the width of the blade. Successive removals from alternate platforms on both lateral margins and dorsal/ventral surfaces results in medially ridged bifacially flaked trianguloid cross sections. Fifty-nine of those were broken. The original striking platform often remains at their proximal ends. Width and thickness varies. Traces of use are rare. None had a functional distal end.

Class II blades have finer retouch than Class 1 artifacts. Most are broken proximal ends of bifacial tools. Cross section is biconvex-flattened and thinner and more narrow than in Class 1. They are bifacially flaked along the length of the lateral margins. Opposing flake scars terminate near the mid-line forming a ridge in most cases.

Class III has a projecting transverse working edge producing either a single pointed or bipointed implement. Flaking is bifacial along the whole length of the tool with fine, closely spaced flake scars, overlapping each other and terminating near the mid-line. This forms a cylindrical-biconvex median-ridged cross section.

Twenty-two were broken; 34 have a pointed transverse working edge; 5 are bipointed; 3 are single pointed with a bit; 4 are bipointed with a bit and 2 are drill fragments. Class 3 artifacts may be drill bits and gravers and presumably are complete Class 2 artifacts. For that matter, these classes probably all represent the same kind of object--drills or gravers. Table 61 summarizes wear attributes. The wear is consonant with an interpretation of a drill or graver.

Prehistoric Metal Artifacts

Copper Plate (Fig. 54). A thin rectangular copper plate embossed with a Southern Cult busk motif was found with Burial 20B&C. It was approximately 340 mm long, 172 mm wide and 2 mm thick.

Copper Pendants (Figs. 49, 55). Twelve copper "pendants" were recovered from Burial 20B&C. These were cut or stamped from sheet copper and all but one had a small hole punched through the broad end. Two of these (Fig. 45) are embossed with the weeping eye motif. The pendants range in size from 70-80 mm long, 40-50 mm wide and 1 mm thick. Five were repaired by using copper rivets to mend cracks and broken edges.

Copper Coated Ear Plug (not illustrated). A disk shaped piece of carved wood covered with copper was recovered from Burial 29.

Ground Galena Cubes (Fig. 49). Two cubes of galena with grinding were recovered; one from Burial 20 and one from Burial 29.

Table 61. Use Induced Wear on 20 Class II and Class III Microliths.

Cat No.	Edge Rounding	Edge Faceting	Edge Smoothing	Edge Polish	Edge Blunting	Edge Crushing	Edge Striations	Edge Grinding	Step Flaking	Surface Scratches	Surface Rounding	Surface Smoothing	Surface Polish	Surface Grinding
CLASS II														
52-11	x	-	-	-	-	-	-	x	-	-	-	-	-	-
54-13	x	-	x	-	-	-	-	x	x	-	-	-	-	-
52-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51-20	x	-	x	-	x	-	-	-	x	-	-	-	-	-
52-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
458-55	x	-	x	x	x	-	-	-	x	-	x	x	-	-
LARGE														
614-426	x	-	x	x	x	-	-	-	x	-	-	-	-	-
661-3	x	-	x	x	x	-	-	-	x	-	-	-	-	-
52-15	x	-	x	x	x	x	-	-	x	-	x	x	-	-
SMALL CLASS III														
DRILL														
50-3937	x	-	x	-	x	-	-	-	x	-	-	-	-	-
52-26	x	-	x	-	x	-	-	-	x	-	-	-	-	-
52-29	x	-	x	x	x	-	-	-	x	-	-	-	-	-
52-10	x	-	x	-	x	-	-	-	x	-	-	-	-	-
348-39	x	-	x	x	x	-	-	-	x	-	-	-	-	-
59-323	x	-	x	x	x	-	-	-	x	-	x	x	x	-
CHISEL														
648-1737	x	-	x	x	x	-	-	-	x	-	-	-	-	-
47-1012	x	-	x	-	x	-	-	-	x	-	-	-	-	-
48-416	x	-	x	-	x	x	-	-	x	-	-	-	-	-
52-17	x	-	x	-	x	-	-	-	x	-	-	-	-	-
52-13	x	-	x	-	-	-	-	-	x	-	-	-	-	-

x present
\- absent

Figure 54. Site 1Pi33. Copper Plate.

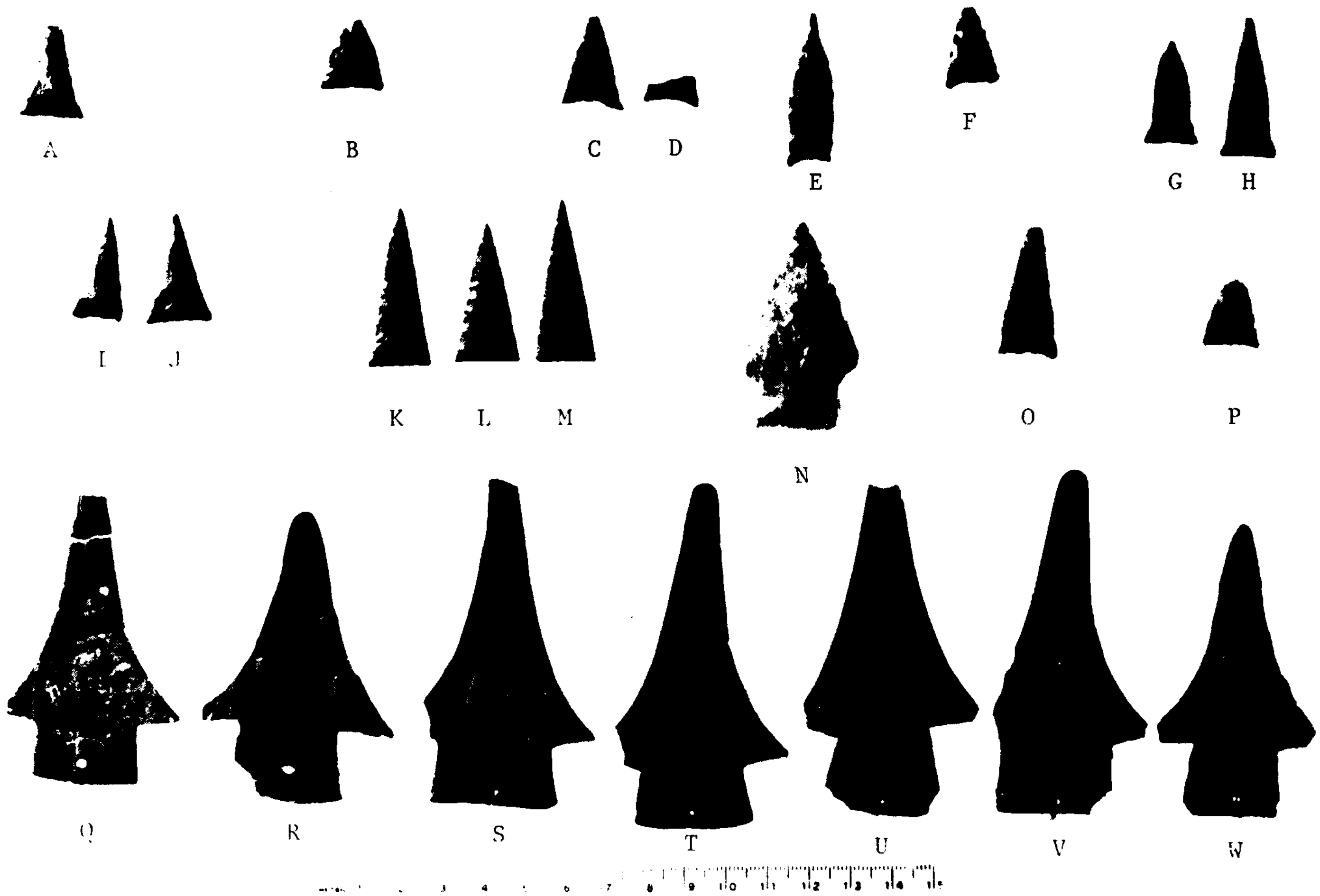

Figure 55. Lithic and Metal Artifacts in Direction Association with Burials. Class 2 Arrow Point, A (Site 1P161, Burial 62B): Class 1 Arrow Point, B (Site 1P161, Burial 55); Class 4 Arrow Points, C-D (Site 1P161, Burial 13C): Class 20 Arrow Point, E (Site 1P161, Burial 55); Class 1 Arrow Point, F (Site 1P161, Burial 35); Class 19 Arrow Point, G (Site 1P161, Burial 36); Class 2 Arrow Point, H (Site 1P161, Burial 13B); Class 2 Arrow Point, I-J (Site 1P133, Burial 18); Class 2 Arrow Points (Pristine), K-M (Site 1P133, Burial 18); Class 110 Projectile Point, N (Site 1P133, Burial 24); Class 2 Arrow Point, O (Site 1P133, Burial 20B); Class 1 Arrow Point, P (Site 1P133, Burial 20C); Copper Pendants, Q-W (Site 1P133, Burial 20B & C).

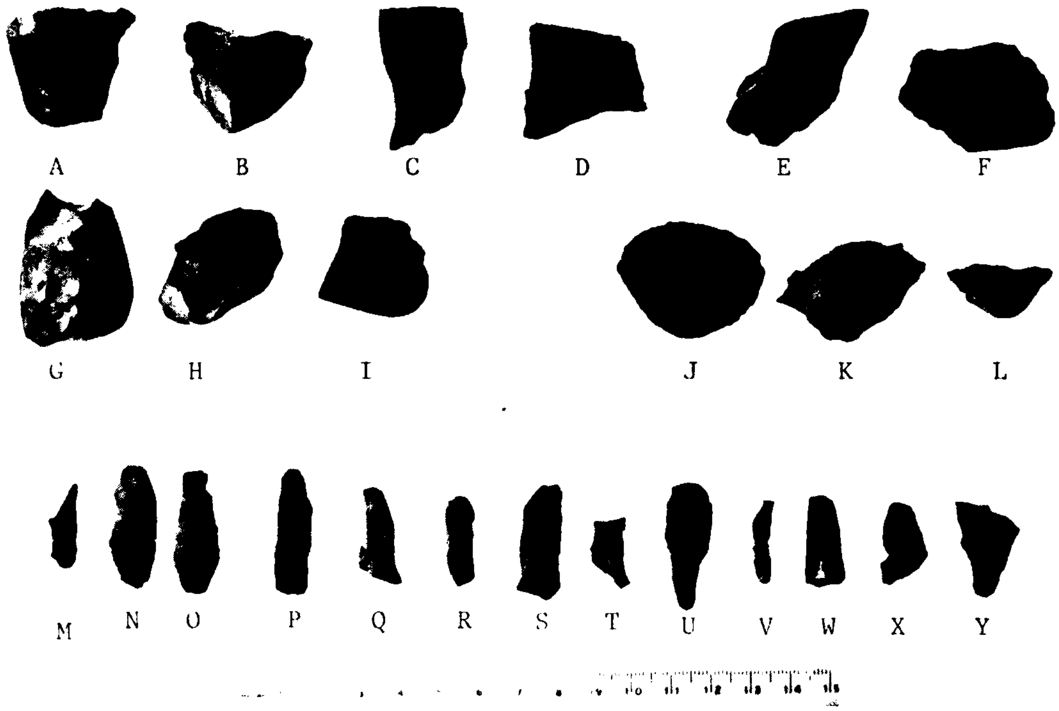

Figure 56. Site 1Pi33, Lubbub Creek Microlith Industry. Blade Cores, A-L; Blades, M-Y.

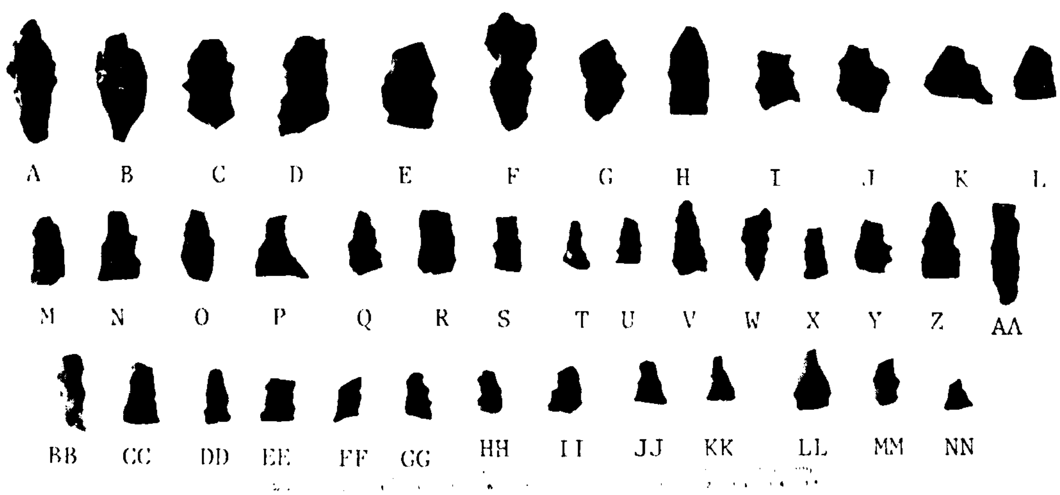

Figure 57. Site 1Pi33, Lubbub Creek Microlith Industry. Large Class I Preforms, A-L; Small Class I Preforms, M-NN.

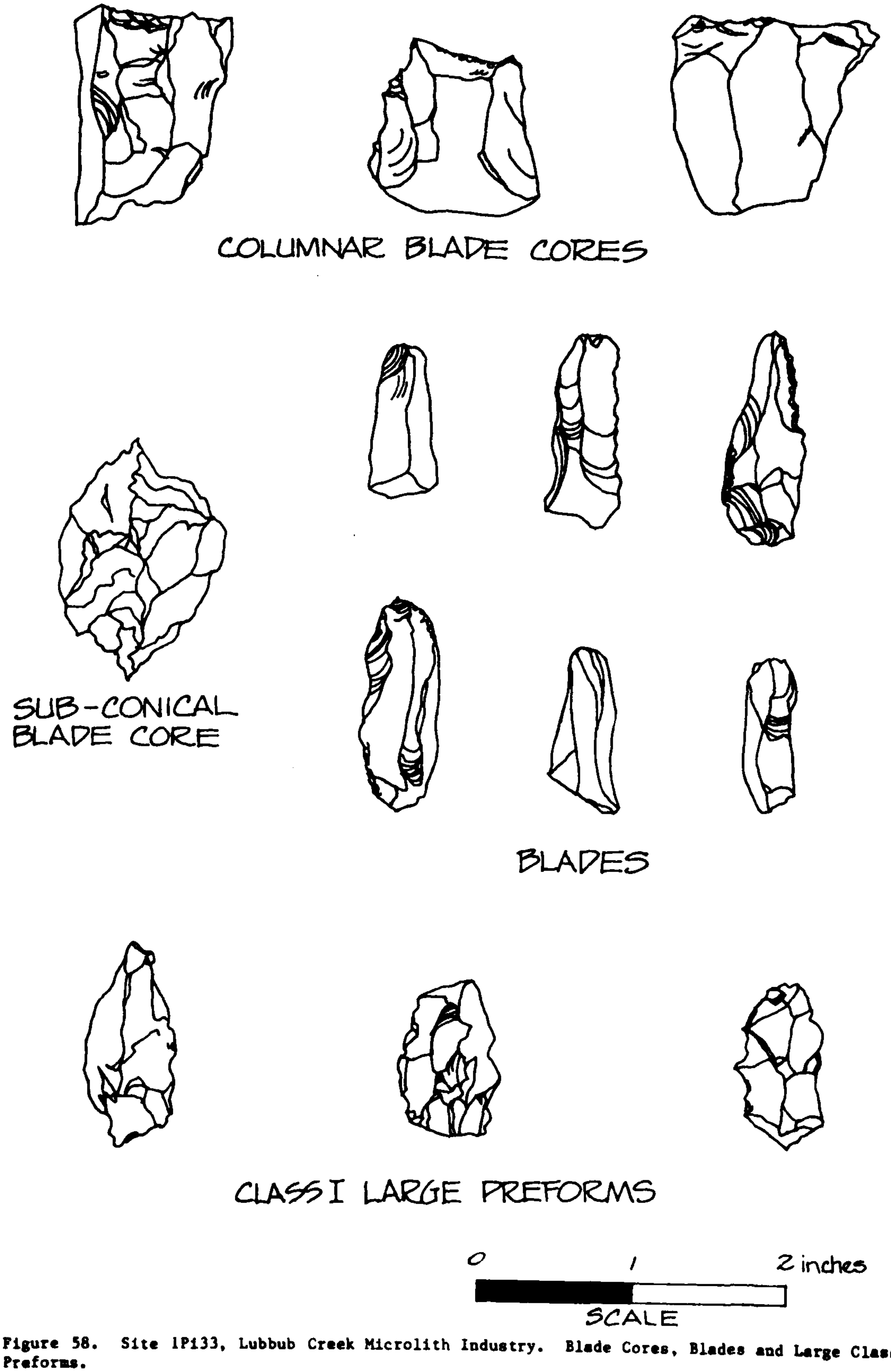

Figure 58. Site 1Pi33, Lubbub Creek Microlith Industry. Blade Cores, Blades and Large Class I Preforms.

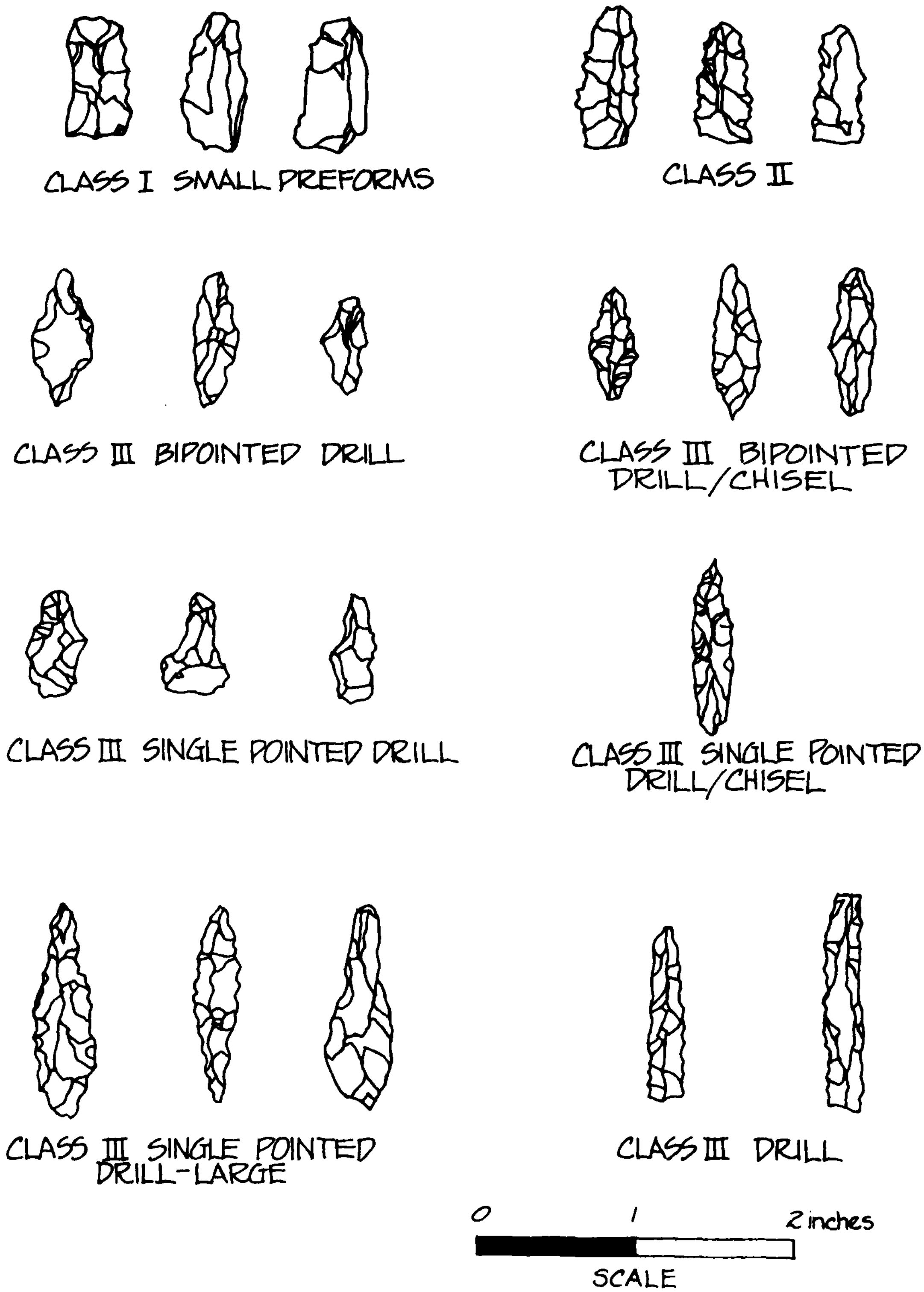

Figure 59. Site 1Pi33, Lubbub Creek Microlith Industry. Small Class I Preforms; Class II Medial and Proximal Drill Sections, Class III Bipointed Drills, Drill/Chisels and Single Pointed Drills.

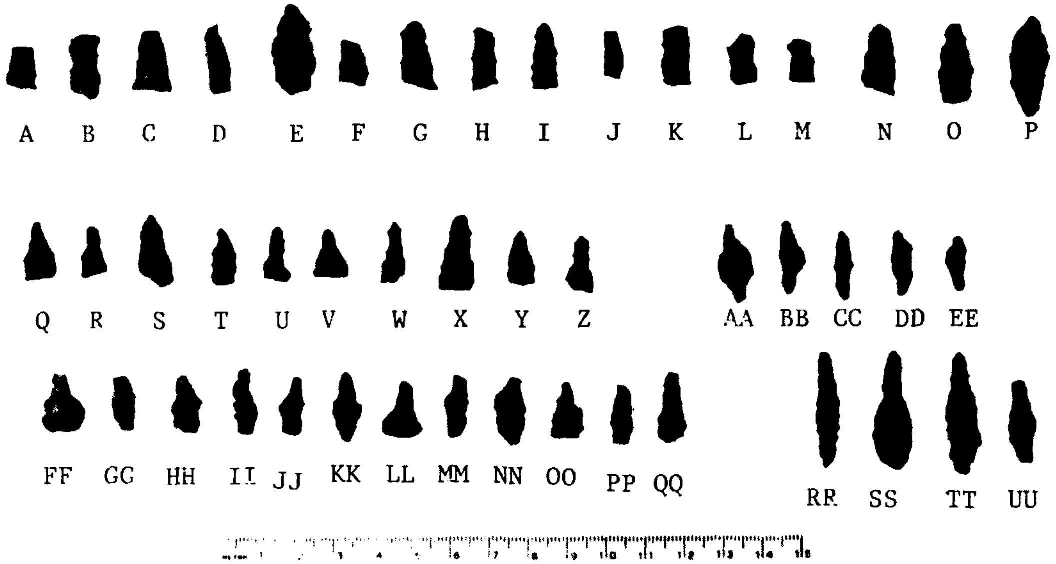

Figure 60. Site 1Pi33, Lubbub Creek Microlith Industry. A-P, Class II Medial and Proximal Drill Sections; Q-Z, Class III Single Pointed/Broken Drills; AA-CC, Class III Bi-Pointed Drills; FF-QQ, Class III Intact Single Pointed Drills; RR-VV, Class III Large Drills.

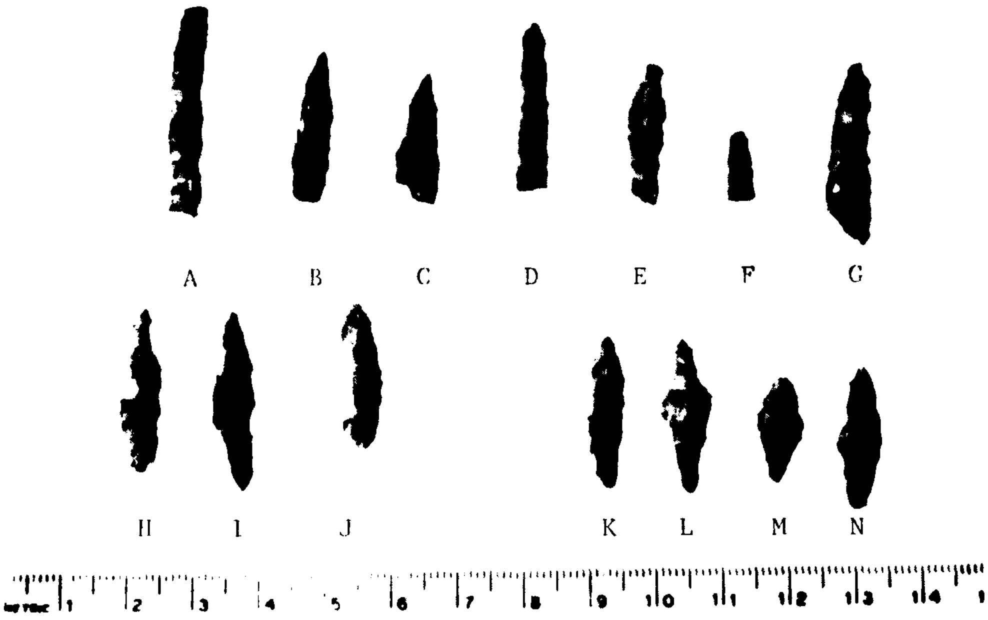

Figure 61. Site 1Pi33, Lubbub Creek Microlith Industry. A-G, Class III Drills and Drill Fragments; H-J, Class III Single Pointed Chisel-Drills; K-N, Bi-Pointed Chisel-Drills.

Table 62. 1Pi33 Burial Association Lithic and Metal Artifacts.

Feature 31 (Bu 24)	1 Class 110 Tallahatta Quartzite point Fig. 54 (McIntire).
Feature 35 (Bu 25)	1 Class 99 artifact made of Tallahatta Quartzite, resharpened into drill.
Feature 42 (Bu 15)	Polished greenstone celt, 135 mm 46 mm 23 mm. One end is in the form of a transverse biconvex bit. The other end is formed by a tapered poll or butt section which is drilled, presumably for hafting. Striations are present on the surface from gridning and polishing.
Feature 43 (Bu 27)	10 fragments of thin copper plating weighting approximately 2 g.
Feature 46 (Bu 18)	1 sandstone abrader, ground smooth on both faces with slight pitting on one surface. (Not illustrated). 3 Class 2 arrow points in pristine condition. These are finely pressure flaked and thermally altered, (2 Misc., 1 DRC). These were positioned near the right humerus near the sandstone abrader and several bone tools. Fig. 48. 2 Class 2 arrow points (DRC) located near the right humerus near the distal end of the right femur (Fig. 48). These are less well made than the other 3 points. Five red ocher fragments.
Feature 48 (Bu 20 B&C)	1 Ground Hematite nodule (Fig. 48). 1 embossed copper plate *Eagle Dancer-Warrior Captain*. *Fig.* 53. 12 copper cut-outs, 2 embossed with the weeping eye motif. Figs. 48-54. All but one of these had a punched hole at the end opposite tip of cutout in the approximated cneter. Size-wise these artifacts ranged from 70-80 mm in length to 40-50 mm in width and were around 1 mm thick. Five of these had been repaired in the following manner. 1 - corner repaired - 2 cut rivets tip repaired - 2 Cu rivet. 1 - corner repaired, no rivets observable 1 - base (broad) end repaired-no rivets observable-possibly hammered. 1 - one copper cut-put had been split longitudinally and repaired with another piece of sheet copper (Fig. 43). Cu rivets totaling 5 were placed on either side of the break to secure the two portions together.
Feature 48 (Bu 20 B)	1 Class 2 arrow point from right chest region (DRC). Fig. 54.
Feature 48 (Bu 20 B)	1 Class 1 arrow point (Misc.) found in spinal column. Fig. 54. 1 galena cube, ground, from lower left rib cage - weight 52 g. Fig. 48.
Feature 49 (Bu 28a)	1 Galena cube, ground, from the vicinity of the left clavicle - weight 47 g. Fig. 48.
Feature 50 (Bu 29)	1 Cu coated wooden ear plug? Not illustrated. 24.2 mm in diameter. Carved wooden plug covered with copper salts found in left mastoid region of skull.

Table 63. Site 1Pi33. Distribution of Projectile Points.

Provenience	Class																																					
Test Units	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	30	34	55	57	81	85	88	96	97	99	101	103	111	150	168	169	170	171	Total
340L50																																						
Level 1	1											1																		1								3
Subtotal	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
345L145																																						
Level 1																																					2	2
Level 2															1																							1
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
370L10																																						
Level 1																																					1	1
Level 2			1						1																												1	3
Subtotal	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
480L125																																						
Level 1				1																																	1	2
Level 3								1																														1
Subtotal	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
520R10																																						
Level 1																																		1				1
Level 2	1			2				1																														4
Level 3	1											1																										2
Subtotal	2	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7
545R10																																						
Level 1	1										1																							1				3
Level 2						1																												1				2
Subtotal	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5
510R30																																						
Level 2	1																																	1				2
Level 3	4	1	1													1																				1	2	10
Subtotal	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	12
585R35																																						
Level 1				1																																	1	2
Level 2			1						1																									2		1	2	7
Level 3									1																													1
Subtotal	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	10
585L50																																						
Level 1	1	1		2					1																													5
Level 2				1									1						1																		2	5
Subtotal	1	1	0	3	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
560L55																																						
Level 1			1																																			1
Level 2	1	1							1	1							1																				1	6
Subtotal	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
510L60																																						
Level 1	1	1	1																															1		1	2	7
Level 2				1								1																						1				3
Subtotal	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	10
520L70																																						
Level 1	1									1																								1			1	4
Level 2															1																						1	2
Subtotal	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	6
540R80																																						
Level 1	2			1			1					1			1																			1		1	2	10
Subtotal	2	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	10
565L100																																						
Level 1	1																																					1
Subtotal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
510L105																																						
Level 1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0														1	5
Level 2	1			2																														1		1	2	7
Subtotal	3	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	12
510R130																																						
Level 2		1																																				1
Subtotal	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
510L130																																						
Level 1		1																																1		1	2	5
Level 2										1																											1	2
Subtotal	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	7
575L140																																						
Level 3				1																																		1
Subtotal	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
605R10																																						
Level 2	1																																				2	3
Level 3																																		1				1
Subtotal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	4
600R15																																						
Level 2	1			1			1		1	1	1																							1	1		1	9
Level 4																																					1	1
Subtotal	1	0	0	1	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	10
675L115																																						
Level 4										1		1																										2
Subtotal	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
610R140																																						
Level 1										1																												1
Subtotal	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730R95																																						
Level 3									1																													1
Subtotal	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
960L70																																						
Level 1	1																																					1
Subtotal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 63. Site 1Pi33. Distribution of Projectile Points (Continued).

Provenience	Class 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	2[illegible]	3[illegible]	34	55	57	81	85	86	96	97	99	101	103	111	150	168	169	170	171	Total
Features																																						
Feature 3	1																																				1	2
Feature 6,																																						
Burial 1 Level 3	2			1																																		3
Burial 2 Level 3	1			2																																		3
Feature 6-C,																																						
Structure 1																							1															1
Feature 13, Bur. 6	1																																					1
Feature 15, Bur. 11																																				1		1
Feature 18				1																																		1
Feature 20, Bur. 14		1																																				1
Feature 24, Bur. 23	2																																					2
Feature 25, Bur. 9																																		1			1	2
Feature 31, Bur. 24		1																																			1	2
Feature 32	1			1																																		2
Feature 34																																					2	2
Feature 38	1																																					1
Feature 41, Bur. 1[illegible]	2				1																		1	1													1	6
Feature 41, Bur. 91																					1																	1
Feature 42, Bur. 15	1															1																						2
Feature 43, Bur. 27					1																																	1
Feature 44, Bur. 16	1																																					1
Feature 45, Bur. 17	1																																	1				2
Feature 46, Bur. 18		1		1																																		2
Feature 47	5			4																																	2	11
Feature 48, Bur. 20				1																																		1
Feature 49, Bur. 28					1						1																											2
Feature 50																																			1			1
Feature 51																																						
Zone A				1																																		1
Zone B	2			3		1				1			1		1					1																		10
Zone D		1											1													1												2
Northeast 1/2				2	1	1													1																			5
Feature 52, Bur. 30																																					1	1
Feature 56, Bur. 33	1			1									1																									3
Controlled Surface																																						
520R10	1																																					1
570R10	1						1																															2
520R20	1																																					1
560R20				1																																		1
550R30	1											1																										2
510L50												1	1																									2
570L60																																						0
590L60												1																										1
520L70							1																															1
570L70				1																																		1
560R80													1																									1
570R80			1																																			1
580R80		1							1																													2
590R80	1																																					1
560R100														1																								1
590R100																															1							1
520L120							1																															1
540L120	1																																					1
560L120										1																												1
580L130	1																																					1
580L140	1			1																																		2
600R10	1																																					1
650R10									1																													1
660R10				1																																		1
670R10	1																																					1
630R20			1																																			1
670R20										1									1																			2
690R20	1																																					1
630R30												1																										1
660R30										1																												1
640L50											1																											1
600R80	1																																					1
690R80																																						1
610R90		1							1																									1				2
620R90	1																																					1
750R20										1																												1
760R20										1																												1
780R20										1																												1
710L70										1																												1
820L60		1																																				1
860L60						1																																1
870L60		1																																				1
Subtotal	37	8	1	21	6	4	3	1	4	8	2	7	5	1	1	1	0	0	2	1	1	0	2	1	1	1	2	1	1	0	1	2	1	3	1	1	9	14[illegible]
Surface	5	1	1	1	2	1		1	1			3										1			1		2	1	1			2	1					25
Class total	62	15	8	36	6	5	5	3	11	14	4	12	6	1	4	2	1	1	3	1	1	1	2	1	1	1	2	1	1	1	1	2	1	17	2	7	38	280

Table 64. Site 1Pi133. Introduced Rock From Excavation Units.

USN: 9605 1.5X1.5M - Level 1
SW CORNER 328N -17E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	2	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	47	---	---
PRIMARY DECORTI-CATION FLAKE	4	---	17	---	---
SECONDARY DECOR-TICATION FLAKE	6	1	102	---	---
BIFACIAL THINNING FLAKE	---	3	42	---	---
OTHER FLAKE	---	2	14	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	4	---	---

USN: 9605 1.5X1.5M - Level 2
SW CORNER 328N -17E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	2	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	30	---	---
PRIMARY DECORTI-CATION FLAKE	1	---	3	---	---
SECONDARY DECOR-TICATION FLAKE	9	---	22	---	---
BIFACIAL THINNING FLAKE	2	6	25	---	---
OTHER FLAKE	2	2	8	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	12	---	---

USN: 9607 1.5X1.5M - Level 1
SW CORNER 325N -45E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	24	---	---
PRIMARY DECORTI-CATION FLAKE	1	---	11	---	---
SECONDARY DECOR-TICATION FLAKE	3	---	34	---	---
BIFACIAL THINNING FLAKE	10	---	31	---	---
OTHER FLAKE	2	---	13	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	1	---	10	---	---

USN: 9608 1.5X1.5M-Level 2
SW CORNER 325N -46E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	41	---	---
PRIMARY DECORTI-CATION FLAKE	6	---	11	---	---
SECONDARY DECOR-TICATION FLAKE	2	---	52	---	---
BIFACIAL THINNING FLAKE	3	3	30	---	---
OTHER FLAKE	2	---	6	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	4	---	---

USN: 9609 1.5X1.5M-Level 1
SW CORNER 367N -5E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	19	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	18	---	---
SECONDARY DECOR-TICATION FLAKE	[illegible]	---	54	---	---
BIFACIAL THINNING FLAKE	6	---	46	---	---
OTHER FLAKE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BLADE-LIKE FLAKE	---	[illegible]	[illegible]	[illegible]	[illegible]
BLADE	---	---	---	---	---
OTHER	1	---	12	---	---

USN: 9610 1.5X1.5M- Level 2
SW CORNER 367N -5E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	2	---	---	---	---
SECONDARY CORE	2	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	1	14	---	---
PRIMARY DECORTI-CATION FLAKE	15	---	12	---	---
SECONDARY DECOR-TICATION FLAKE	29	---	57	---	---
BIFACIAL THINNING FLAKE	15	---	65	---	---
OTHER FLAKE	5	3	30	---	---
AMORPHOUS FLAKE	1	---	---	---	---
BLADE-LIKE FLAKE	1	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	25	---	---

USN: 9611 1.5X1.5M - Level 1
SW CORNER 370N -40E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	24	---	---
PRIMARY DECORTI-CATION FLAKE	1	---	8	---	---
SECONDARY DECOR-TICATION FLAKE	5	---	41	---	---
BIFACIAL THINNING FLAKE	5	---	29	---	---
OTHER FLAKE	3	---	14	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	11	---	---

USN: 9612 1.5X1.5M - Level [illegible]
SW CORNER 370N -40E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	45	---	---
PRIMARY DECORTI-CATION FLAKE	4	---	9	---	---
SECONDARY DECOR-TICATION FLAKE	10	1	86	---	---
BIFACIAL THINNING FLAKE	1	---	37	---	---
OTHER FLAKE	2	1	14	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	19	---	---

USN: 9613 1.5X1.5M -Level 3
SW CORNER 370N -40E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	42	---	---
PRIMARY DECORTI-CATION FLAKE	5	---	22	---	---
SECONDARY DECOR-TICATION FLAKE	18	---	75	---	---
BIFACIAL THINNING FLAKE	6	1	54	---	---
OTHER FLAKE	2	1	17	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

USN: 9614 1.5X1.5M -Level 1
SW CORNER 380N -20E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	1	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	5	---	69	---	---
PRIMARY DECORTI-CATION FLAKE	3	--	45	---	---
SECONDARY DECOR-TICATION FLAKE	9	---	117	---	---
BIFACIAL THINNING FLAKE	9	---	73	---	---
OTHER FLAKE	3	1	17	---	---
AMORPHOUS FLAKE	---	[illegible]	---	[illegible]	[illegible]
BLADE-LIKE FLAKE	1	---	2	[illegible]	---
BLADE	---	---	---	---	---
OTHER	---	---	14	[illegible]	[illegible]

Table 64. Site 1Pi33. Introduced Rock From Excavation Units (Continued).

USN: 9615 1.5X1.5M - Level 2
SW CORNER 380N -20E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	27	---	---
PRIMARY DECORTICATION FLAKE	2	---	18	---	---
SECONDARY DECORTICATION FLAKE	6	---	66	---	---
BIFACIAL THINNING FLAKE	1	---	40	---	---
OTHER FLAKE	1	---	7	---	---
AMORPHOUS FLAKE	---	1	---	---	---
BLADE-LIKE FLAKE	1	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	11	---	---

USN: 9616 1.5X1.5M - Level 1
SW CORNER 380N -34E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	-	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	70	---	---
PRIMARY DECORTICATION FLAKE	9	---	143	---	---
SECONDARY DECORTICATION FLAKE	15	---	246	---	---
BIFACIAL THINNING FLAKE	23	---	---	---	---
OTHER FLAKE	2	---	42	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	29	---	---

USN: 9617 1.5X1.5M - Level 2
SW CORNER 380N -34E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	2	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	62	---	---
PRIMARY DECORTICATION FLAKE	6	---	40	---	---
SECONDARY DECORTICATION FLAKE	12	---	205	---	---
BIFACIAL THINNING FLAKE	2	---	133	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	3	---	16	---	---
BLADE-LIKE FLAKE	---	---	8	---	---
BLADE	---	---	---	---	---
OTHER	---	---	12	---	---

USN: 9618 1.5X1.5M - Level 3
SW CORNER 380N -34E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	6	---	---
PRIMARY DECORTICATION FLAKE	2	---	3	---	---
SECONDARY DECORTICATION FLAKE	3	---	16	---	---
BIFACIAL THINNING FLAKE	1	1	6	---	---
OTHER FLAKE	2	---	7	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9619 1.5X1.5M - Level 1
SW CORNER 380N -41E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	49	---	---
PRIMARY DECORTICATION FLAKE	---	---	16	---	---
SECONDARY DECORTICATION FLAKE	17	---	113	---	---
BIFACIAL THINNING FLAKE	13	1	15	---	---
OTHER FLAKE	4	---	19	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

USN: 9620 1.5X1.5M - Level 2
SW CORNER 380N -41E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	7	---	26	---	---
PRIMARY DECORTICATION FLAKE	6	---	9	---	---
SECONDARY DECORTICATION FLAKE	67	---	90	---	---
BIFACIAL THINNING FLAKE	29	---	50	---	---
OTHER FLAKE	14	---	12	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	11	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9621 1.5X1.5M - Level 1
SW CORNER 380N 9E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	6	---	24	---	---
PRIMARY DECORTICATION FLAKE	7	---	12	---	---
SECONDARY DECORTICATION FLAKE	7	---	53	---	---
BIFACIAL THINNING FLAKE	5	---	26	---	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	22	---	---

USN: 9622 1.5X1.5M - Level
SW CORNER 380N 9E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	1	---	---
SECONDARY CORE	1	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	34	---	173	---	
PRIMARY DECORTICATION FLAKE	6	---	24	---	---
SECONDARY DECORTICATION FLAKE	26	---	178	---	---
BIFACIAL THINNING FLAKE	15	---	81	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	3	---	12	---	---
BLADE	---	---	---	---	---
OTHER	---	---	42	---	---

USN: 9623 1.5X1.5M - Level
SW CORNER 383N -23E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	27	---	---
PRIMARY DECORTICATION FLAKE	1	---	31	---	---
SECONDARY DECORTICATION FLAKE	8	---	155	---	---
BIFACIAL THINNING FLAKE	5	---	92	---	---
OTHER FLAKE	1	---	20	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	5	---	---

USN: 9624 1.5X1.5M - Level 2
SW CORNER 383N -23E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	25	---	---
PRIMARY DECORTICATION FLAKE	2	---	21	---	---
SECONDARY DECORTICATION FLAKE	4	---	74	---	---
BIFACIAL THINNING FLAKE	5	---	33	---	---
OTHER FLAKE	1	---	13	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	6	---	---

Table 64. Site 1Pi33. Introduced Rock From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level 1
SW CORNER 383N 2E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	8	---	---
PRIMARY DECORTICATION FLAKE	1	---	6	---	---
SECONDARY DECORTICATION FLAKE	2	---	29	---	---
BIFACIAL THINNING FLAKE	5	---	11	---	---
OTHER FLAKE	1	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9625 1.5X1.5M - Level 2
SW CORNER 383N 2E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	[illegible]	---	---
PRIMARY DECORTICATION FLAKE	4	---	11	---	---
SECONDARY DECORTICATION FLAKE	10	---	50	---	---
BIFACIAL THINNING FLAKE	6	1	35	---	---
OTHER FLAKE	1	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9627 1.5X1.5M - Level 1
SW CORNER 389N 26E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	40	---	---
PRIMARY DECORTICATION FLAKE	7	---	19	---	---
SECONDARY DECORTICATION FLAKE	14	---	128	---	---
BIFACIAL THINNING FLAKE	2	---	54	---	---
OTHER FLAKE	1	---	13	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

USN: 9623 1.5X1.5M - Level 1
SW CORNER 390N 2E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	16	---	---
PRIMARY DECORTICATION FLAKE	5	---	11	---	---
SECONDARY DECORTICATION FLAKE	5	---	45	---	---
BIFACIAL THINNING FLAKE	4	---	28	---	---
OTHER FLAKE	---	1	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9629 1.5X1.5M - Level 2
SW CORNER 390N 2E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	10	---	---
PRIMARY DECORTICATION FLAKE	---	---	8	---	---
SECONDARY DECORTICATION FLAKE	6	---	35	---	---
BIFACIAL THINNING FLAKE	4	---	17	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9631 1.5X1.5M - Level 1
SW CORNER 395N -16E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	29	---	---
PRIMARY DECORTICATION FLAKE	3	---	8	---	---
SECONDARY DECORTICATION FLAKE	13	---	100	---	---
BIFACIAL THINNING FLAKE	5	---	55	---	---
OTHER FLAKE	1	1	12	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9632 1.5X1.5M - Level 2
SW CORNER 395N -16E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	30	---	---
PRIMARY DECORTICATION FLAKE	2	---	15	---	---
SECONDARY DECORTICATION FLAKE	---	1	98	---	---
BIFACIAL THINNING FLAKE	4	---	52	---	---
OTHER FLAKE	4	---	5	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

USN: 9633 1.5X1.5M - Level 1
SW CORNER 396N -32E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	1	---	---
UTILIZED FLAKE	---	---	48	---	---
PRIMARY DECORTICATION FLAKE	1	---	14	---	---
SECONDARY DECORTICATION FLAKE	7	---	115	---	---
BIFACIAL THINNING FLAKE	5	---	38	---	---
OTHER FLAKE	4	---	11	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	4	---	---
BLADE	---	---	---	---	---
OTHER	---	---	4	---	---

USN: 9634 1.5X1.5M - Level 2
SW CORNER 396N -32E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	3	---	21	---	---
SECONDARY DECORTICATION FLAKE	9	---	106	---	---
BIFACIAL THINNING FLAKE	3	---	48	---	---
OTHER FLAKE	3	---	5	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	7	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9635 1.5X1.5M - Level 3
SW CORNER 396N -32E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	8	---	---
SECONDARY DECORTICATION FLAKE	9	---	96	---	---
BIFACIAL THINNING FLAKE	4	1	56	---	---
OTHER FLAKE	2	---	11	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	6	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 64. Site 1Pi33. Introduced Rock From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level [illegible]
SW CORNER 394N [illegible]E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	---	---	9	---	---
BIFACIAL THINNING FLAKE	1	---	7	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	1	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9637 1.5X1.5M - Level 1
SW CORNER 399N -44E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	3	---	---
SECONDARY DECORTICATION FLAKE	6	---	32	---	---
BIFACIAL THINNING FLAKE	2	---	18	---	---
OTHER FLAKE	1	1	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9631 1.5X1.5M - Level 2
SW CORNER 399N -44E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	3	---	2	---	---
SECONDARY DECORTICATION FLAKE	8	---	27	---	---
BIFACIAL THINNING FLAKE	5	---	8	---	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9639 1.5X1.5M - Level 3
SW CORNER 399N -44E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	4	---	41	---	---
PRIMARY DECORTICATION FLAKE	5	---	16	---	---
SECONDARY DECORTICATION FLAKE	20	1	86	---	---
BIFACIAL THINNING FLAKE	9	---	41	---	---
OTHER FLAKE	3	---	12	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	8	---	---

USN: 9642 1.5X1.5M - Level 1
SW CORNER 402N -17E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	27	---	---
PRIMARY DECORTICATION FLAKE	5	---	26	---	---
SECONDARY DECORTICATION FLAKE	10	---	167	---	---
BIFACIAL THINNING FLAKE	11	---	83	---	---
OTHER FLAKE	3	---	19	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	6	---	---
BLADE	---	---	---	---	---
OTHER	---	---	4	---	---

USN: 9641 1.5X1.5M - Level 2
SW CORNER 402N [illegible]E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	26	---	---
PRIMARY DECORTICATION FLAKE	5	---	32	---	---
SECONDARY DECORTICATION FLAKE	22	---	257	---	---
BIFACIAL THINNING FLAKE	10	1	107	---	---
OTHER FLAKE	1	1	7	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	5	---	---
BLADE	---	---	---	---	---
OTHER	---	---	6	---	---

USN: 9644 1.5X1.5M - Level 1
SW CORNER 402N 9E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	8	---	---
PRIMARY DECORTICATION FLAKE	---	2	9	---	---
SECONDARY DECORTICATION FLAKE	---	14	61	---	---
BIFACIAL THINNING FLAKE		---	75	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	2	---	---	---
BLADE-LIKE FLAKE	1	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9645 1.5X1.5M - Level [illegible]
SW CORNER 402N 9E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	32	---	---
PRIMARY DECORTICATION FLAKE	3	---	18	---	---
SECONDARY DECORTICATION FLAKE	6	---	92	---	---
BIFACIAL THINNING FLAKE	8	---	44	---	---
OTHER FLAKE	3	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	7	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

USN: 9646 1.5X1.5M - Level 3
SW CORNER 402N 9E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	4	---	---
SECONDARY DECORTICATION FLAKE	10	---	27	---	---
BIFACIAL THINNING FLAKE	4	---	13	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9[illegible] 1.5X1.5M - Level 1
SW CORNER 407N 3E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	4	---	81	---	---
PRIMARY DECORTICATION FLAKE	5	---	39	---	---
SECONDARY DECORTICATION FLAKE	21	---	302	---	---
BIFACIAL THINNING FLAKE	7	2	120	---	---
OTHER FLAKE	3	---	17	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	6	---	---
BLADE	---	---	---	---	---
OTHER	---	---	7	---	---

Table 64. Site 1P133. Introduced Rock From Excavation Units (Continued).

USN: [illegible]
SW CORNER 407N 3E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	11	---	---
SECONDARY DECORTICATION FLAKE	1	---	41	---	---
BIFACIAL THINNING FLAKE	2	---	26	---	---
OTHER FLAKE	1	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9650 1.5X1.5M - Level 3
SW CORNER 407N 3E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTICATION FLAKE	1	---	1	---	---
SECONDARY DECORTICATION FLAKE	5	---	21	---	---
BIFACIAL THINNING FLAKE	5	1	17	---	---
OTHER FLAKE	4	4	11	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9651 1.5X1.5M - Level 4
SW CORNER 407N 3E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9652 1.5X1.5M - Level 5
SW CORNER 407N 3E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	1	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9655 1.5X1.5M - Level 1
SW CORNER 409N 2E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	21	---	---
PRIMARY DECORTICATION FLAKE	6	---	16	---	---
SECONDARY DECORTICATION FLAKE	16	---	163	---	---
BIFACIAL THINNING FLAKE	9	---	98	---	---
OTHER FLAKE	1	---	22	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	8	---	---
BLADE	---	---	---	---	---
OTHER	---	---	4	---	---

USN: [illegible] - Level
SW CORNER 409N 2E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	2	---	---
UTILIZED FLAKE	2	---	39	---	---
PRIMARY DECORTICATION FLAKE	4	---	25	---	---
SECONDARY DECORTICATION FLAKE	10	---	155	---	---
BIFACIAL THINNING FLAKE	4	---	74	---	---
OTHER FLAKE	---	---	15	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	6	---	---
BLADE	---	---	---	---	---
OTHER	---	---	5	---	---

USN: 9654 1.5X1.5M - Level 1
SW CORNER 409N 41E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	6	---	---
PRIMARY DECORTICATION FLAKE	3	---	4	---	---
SECONDARY DECORTICATION FLAKE	11	2	51	---	---
BIFACIAL THINNING FLAKE	1	4	46	---	---
OTHER FLAKE	---	2	15	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	1	---	7	---	---

USN: 9659 1.5X1.5M - Level 2
SW CORNER 409N 41E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	9	---	---	---
PRIMARY DECORTICATION FLAKE	2	---	2	---	---
SECONDARY DECORTICATION FLAKE	3	---	15	---	---
BIFACIAL THINNING FLAKE	1	---	5	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	2	---	---	---

USN: 9660 1.5X1.5M - Level 1
SW CORNER 430N -37E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	8	---	---	---
PRIMARY DECORTICATION FLAKE	1	---	2	---	---
SECONDARY DECORTICATION FLAKE	6	---	21	---	---
BIFACIAL THINNING FLAKE	3	---	[illegible]	---	---
OTHER FLAKE	1	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	1	---	---	---

USN: 9661 1.5X1.5M - Level 2
SW CORNER 430N -37E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	1	---	13	---	---
BIFACIAL THINNING FLAKE	---	---	3	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	1	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 64. Site 1Pi33. Introduced Rock From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level [illegible]
SW CORNER 430N -37E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	6	---	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	1	26	---	---
BIFACIAL THINNING FLAKE	---	---	5	---	---
OTHER FLAKE	---	---	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	3	---	---	---

USN: 9663 1.5X1.5M - Level [illegible]
SW CORNER 430N -37E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	---	---	4	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9664 1.5X1.5M - Level 1
SW CORNER 447N 27E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	6	---	---
PRIMARY DECORTICATION FLAKE	2	---	---	---	---
SECONDARY DECORTICATION FLAKE	3	---	11	---	---
BIFACIAL THINNING FLAKE	---	1	5	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9665 1.5X1.5M - Level 2
SW CORNER 447N 27E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	1	---	18	---	---
BIFACIAL THINNING FLAKE	---	---	5	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9666 1.5X1.5M - Level 3
SW CORNER 447N 27E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	6	---	---
PRIMARY DECORTICATION FLAKE	1	---	12	---	---
SECONDARY DECORTICATION FLAKE	3	---	12	---	---
BIFACIAL THINNING FLAKE	---	---	8	---	---
OTHER FLAKE	---	---	[illegible]	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: [illegible] 1.5X1.5M - Level [illegible]
SW CORNER 447N 27E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	--	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	1	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9668 1.5X1.5M - Level 1
SW CORNER 465N 24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	4	---	---
PRIMARY DECORTICATION FLAKE	2	---	1	---	---
SECONDARY DECORTICATION FLAKE	5	---	24	---	---
BIFACIAL THINNING FLAKE	---	---	9	---	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9669 1.5X1.5M - Level 2
SW CORNER 465N 24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	----	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTICATION FLAKE	1	---	3	---	---
SECONDARY DECORTICATION FLAKE	1	---	20	---	---
BIFACIAL THINNING FLAKE	---	---	10	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9670 1.5X1.5M - Level 3
SW CORNER 465N 24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	2	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9671 1.5X1.5M - Level 1
SW CORNER 495N 53E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 64. Site 1Pi133. Introduced Rock From Excavation Units (Continued).

USN: 9672 1.5X1.5M - Level [illegible]
SW CORNER 495N 53E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	2	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9673 1.5X1.5M- Level 3
SW CORNER 495N 53E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	1	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9674 1.5X1.5M - Level 4
SW CORNER 495N 53E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9675 1.5X1.5M - Level 1
SW CORNER 486N -23E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	6	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	1	---	11	---	---
BIFACIAL THINNING FLAKE	---	---	4	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9675 1.5X1.5M - Level 2
SW CORNER 486N -23E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	1	1	---	---
OTHER FLAKE	---	---	---	---	---
BLADE	---	---			---
OTHER	---	---	---	---	---

USN: 9683 1.5X1.5M - Level 1
SW CORNER 383N 2E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	4	---	5	---	---
PRIMARY DECORTI-CATION FLAKE	3	---	8	---	---
SECONDARY DECOR-TICATION FLAKE	8	---	32	---	---
BIFACIAL THINNING FLAKE	---	---	23	---	---
OTHER FLAKE	1	---	6	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9683 1.5X1.5M - Level 2
SW CORNER 383N 2E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	4	---	5	---	---
PRIMARY DECORTI-CATION FLAKE	3	---	8	---	---
SECONDARY DECOR-TICATION FLAKE	8	---	32	---	---
BIFACIAL THINNING FLAKE	---	---	23	---	---
OTHER FLAKE	1	---	6	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9683 1.5X1.5M - Level 3
SW CORNER 383N 2E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	4	---	5	---	---
PRIMARY DECORTI-CATION FLAKE	3	---	8	---	---
SECONDARY DECOR-TICATION FLAKE	8	---	32	---	---
BIFACIAL THINNING FLAKE	---	---	23	---	---
OTHER FLAKE	1	---	6	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 65. Site 1Pi33. Introduced Rock From Features.

USN: 9001 FEATURE 1
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	---	---
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	1	1
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9002 FEATURE 2
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	430	2001
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	10
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9003 FEATURE 3
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	152	251
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	12	50
CHALK	---	---
LIMESTONE	3	2
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	3
LIMONITE	---	---
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9681 FEATURE 6-LEVEL 1
SW CORNER 486 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	2
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9682 FEATURE 6-LEVEL 2
SW CORNER 488 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	1	1
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	2	6
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	2
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9683 FEATURE 6-LEVEL 3
SW CORNER 488 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	73	82
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	14	105
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	4	5
BRECCIA	---	---
HEMATITE	12	44
LIMONITE	13	13
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	1

USN: [illegible] FEATURE [illegible] LEVEL 1
SW CORNER 484 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	13	3
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9685 FEATURE 6-LEVEL 2
SW CORNER 484 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	5	2
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9686 FEATURE 6-LEVEL 3
SW CORNER 484 N -21E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	36	170
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	5	6
CHALK	1	61
LIMESTONE	---	---
CONGLOMERATE	1	2
BRECCIA	---	---
HEMATITE	8	10
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9687 FEATURE 6-LEVEL 1
SW CORNER 483 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	4	3
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	1	7
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9683 FEATURE 6-LEVEL 2
SW CORNER 483 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	8	14
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	2	24
CHALK	1	454
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9689 FEATURE 6-LEVEL 3
SW CORNER 483 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	51	94
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	3	17
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	--	
HEMATITE		
[illegible]	[illegible]	[illegible]
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED [illegible]	---	---

Table 65. Site 1P133. Introduced Rock From Features (Continued).

USN: [illegible] FEATURE 5-LEVEL 1
SW CORNER 489 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	2
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE 5-LEVEL 2
SW CORNER 488 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	3	35
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9692 FEATURE 6-LEVEL 3
SW CORNER 488 N -24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	93	44
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	10	55
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	3	10
BRECCIA	---	---
HEMATITE	23	20
LIMONITE	---	---
PETRIFIED WOOD	1	9
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	1

USN: 9693 FEATURE 6A
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	---	---
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9006 FEATURE 7
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	9	21
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9007 FEATURE 8
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	2
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	--	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE 9-BURIAL 2
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	104	115
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	15	21
CHALK	3	279
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	17	14
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	1

USN: 9009 FEATURE 10-BURIAL 3
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	28	48
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	18
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9010 FEATURE 11-BURIAL 4
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	1
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9011 FEATURE 12-BURIAL 5
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	23	31
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	1	1
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE 13-BURIAL 6
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	11	12
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9014 FEATURE 15-BURIAL 11
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	94	210
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	14	82
CHALK	1	18
LIMESTONE	---	---
CONGLOMERATE	2	2
BRECCIA	---	---
HEMATITE	2	1
LIMONITE	---	---
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 65. Site 1Pi133. Introduced Rock From Features (Continued).

USN: 9015 FEATURE 16-BURIAL 17
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	26	29
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	2	[illegible]
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	2
LIMONITE	---	---
PETRIFIED WOOD	2	6
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9016 FEATURE 17-BURIAL 13
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	5	6
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9017 FEATURE 18
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	49	52
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	9	27
CHALK	[illegible]	[illegible]
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	8
LIMONITE	---	---
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9018 FEATURE 19-BURIAL 10
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	2
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9017 FEATURE 20-BURIAL 14
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	27	26
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	2	5
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9021 FEATURE 22-BURIAL 21
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	94	102
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	6	15
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	79
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9023 FEATURE 24-BURIAL 23
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	261	280
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	5	40
CHALK	2	1
LIMESTONE	---	---
CONGLOMERATE	2	7
BRECCIA	---	---
HEMATITE	11	26
LIMONITE	---	---
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9024 FEATURE 25-BURIAL 9
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	33	71
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	1	2
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	--	

USN: 9025 FEATURE 26
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	8	3
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	[illegible]	[illegible]
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9026 FEATURE 27
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	27	66
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	5	32
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	1	1
HEMATITE	2	2
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9027 FEATURE 28
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	29	75
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	3
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9028 FEATURE 29
SW CORNER --- N ---E

	UNMODIFIED INTRODUCED ROCK COUNT	WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	11	11
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	2	44
CHALK	---	---
LIMESTONE	---	
CONGLOMERATE		
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	1
PETRIFIED WOOD	2	3
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	--	

Table 65. Site 1Pi33. Introduced Rock From Features (Continued).

USN: 9029 FEATURE 30-BURIAL 22
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	16	33
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	5	7
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	23	35
PETRIFIED WOOD	2	7
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9036 FEATURE 37
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	13
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9030 FEATURE 31-BURIAL 24
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	141	313
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	16	95
CHALK	1	233
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	5
LIMONITE	2	2
PETRIFIED WOOD	7	10
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9037 FEATURE 38
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	22	99
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	1	55
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	---	---
PETRIFIED WOOD	3	7
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9031 FEATURE 32
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	88	57
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	2	20
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	2
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9039 FEATURE 40
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	10	25
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	4	11
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	2
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9033 FEATURE 34
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	11	6
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9040 FEATURE 41-BURIAL 19
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	385	736
CRACKED COBBLE FRAGMENTS	55	---
SANDSTONE	86	323
CHALK	1	4
LIMESTONE	---	---
CONGLOMERATE	3	5
BRECCIA	---	---
HEMATITE	12	46
LIMONITE	39	67
PETRIFIED WOOD	4	10
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9034 FEATURE 35-BURIAL 25
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	40	59
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	7	87
CHALK	1	2
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9041 FEATURE 42-BURIAL 15
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	253	613
CRACKED COBBLE FRAGMENTS	7	---
SANDSTONE	49	150
CHALK	5	26
LIMESTONE	---	---
CONGLOMERATE	---	2
BRECCIA	---	---
HEMATITE	3	6
LIMONITE	30	100
PETRIFIED WOOD	8	15
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9035 FEATURE 36-BURIAL 26
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	4	15
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	1	4
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9042 FEATURE 43-BURIAL 27
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	134	380
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	24	273
CHALK	2	2
LIMESTONE	---	---
CONGLOMERATE	2	4
BRECCIA	---	---
HEMATITE	13	35
LIMONITE	---	---
PETRIFIED WOOD	14	28
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 65. Site 1P133. Introduced Rock From Features (Continued).

USN: [illegible] FEATURE [illegible]
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	105	133
CRACKED COBBLE FRAGMENTS	8	---
SANDSTONE	10	52
CHALK	4	57
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	6
LIMONITE	2	8
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9044 FEATURE 45-BURIAL 17
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	242	265
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	19	158
CHALK	1	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	11	21
LIMONITE	9	9
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9045 FEATURE 46-BURIAL 19
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	224	484
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	39	138
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	6	6
LIMONITE	1	5
PETRIFIED WOOD	5	50
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9046 FEATURE 47
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	466	722
CRACKED COBBLE FRAGMENTS	15	---
SANDSTONE	19	354
CHALK	4	12
LIMESTONE	6	244
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	8	37
LIMONITE	1	6
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE [illegible]-BURIAL [illegible]
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	424	639
CRACKED COBBLE FRAGMENTS	14	---
SANDSTONE	55	585
CHALK	1	1
LIMESTONE	3	8
CONGLOMERATE	1	1
BRECCIA	---	---
HEMATITE	4	7
LIMONITE	10	16
PETRIFIED WOOD	9	31
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9048 FEATURE 45-BURIAL 24
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	169	174
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	14	83
CHALK	4	15
LIMESTONE	---	---
CONGLOMERATE	1	7
BRECCIA	---	---
HEMATITE	7	29
LIMONITE	3	8
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE [illegible]
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	143	163
CRACKED COBBLE FRAGMENTS	9	---
SANDSTONE	11	170
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	37	161
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9050 FEATURE 51-ALL2
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	1353	2145
CRACKED COBBLE FRAGMENTS	16	---
SANDSTONE	79	943
CHALK	9	15
LIMESTONE	36	63
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	14	54
LIMONITE	---	---
PETRIFIED WOOD	6	30
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9051 FEATURE 51A
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	316	345
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	10	43
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	320
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	10	5
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9052 FEATURE 51B
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	863	1633
CRACKED COBBLE FRAGMENTS	36	---
SANDSTONE	43	171
CHALK	5	61
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	6	50
LIMONITE	27	267
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9053 FEATURE 51C
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	266	422
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	11	21
CHALK	4	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	5	7
LIMONITE	13	26
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9054 FEATURE 51D
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	44	110
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	7	16
CHALK	1	230
LIMESTONE	---	---
CONGLOMERATE	--	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	9	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 65. Site 1Pi133. Introduced Rock From Features (Continued).

USN: [illegible] FEATURE 52-BURIAL 30
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	204	299
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	26	126
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	1
BRECCIA	---	---
HEMATITE	25	114
LIMONITE	40	44
PETRIFIED WOOD	1	4
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9057 FEATURE 54-BURIAL 31
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	98	185
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	32	141
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9053 FEATURE 55-BURIAL 32
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	35	141
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	4	9
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	2	3
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	4	5
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9057 FEATURE 56-BURIAL 33
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	108	213
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	5	92
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	10	8
LIMONITE	---	---
PETRIFIED WOOD	2	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9060 FEATURE 57-BURIAL 34
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	46	121
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	6	127
CHALK	1	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9062 FEATURE 59-BURIAL 35
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	158	205
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	1	21
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] FEATURE 60-BURIAL 36
SW CORNER --- N ---E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	21	38
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	4	48
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	83
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9702 ZONE A-STRUCTURE 2
SW CORNER 402 N -1E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	142	93
CRACKED COBBLE FRAGMENTS	7	---
SANDSTONE	6	10
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	15
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	7	3
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9703 ZONE B-STRUCTURE 2
SW CORNER 402 N -1E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	79	65
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	20	68
CHALK	1	102
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	32
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9704 ZONE C-STRUCTURE 2
SW CORNER 402 N -1E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	301	315
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	6	15
CHALK	1	155
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	49
LIMONITE	---	---
PETRIFIED WOOD	3	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9959 0.91X30.48M TEST TRENCH
SW CORNER 543 N -183E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	4
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	15	437
CHALK	27	220
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	98
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1Pi33. Debitage From Excavation Units.

USN: 9605 1.5X1.5M - Level 1
SW CORNER 328 N -17E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	249	287
CRACKED COBBLE FRAGMENTS	33	---
SANDSTONE	47	223
CHALK	1	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	7	11
LIMONITE	2	8
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	746

USN: 9606 1.5X1.5M - Level 2
SW CORNER 328 N -17E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	148	155
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	54	318
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	16	48
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 96[illegible] 1.5X1.5M - Level 1
SW CORNER 32[illegible] N -46E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	124	112
CRACKED COBBLE FRAGMENTS	133	---
SANDSTONE	14	65
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE		56
BRECCIA	---	---
HEMATITE	1	4
LIMONITE	---	---
PETRIFIED WOOD	1	[illegible]
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9608 1.5X1.5M - Level 2
SW CORNER 329 N -46E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	123	201
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	4	21
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	8	10
LIMONITE	3	3
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9609 1.5X1.5M - Level 1
SW CORNER 367 N -5E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	211	239
CRACKED COBBLE FRAGMENTS	29	---
SANDSTONE	4	23
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	4
LIMONITE	1	0
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	2	6

USN: 9610 1.5X1.5M - Level 2
SW CORNER 367 N -5E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	448	657
CRACKED COBBLE FRAGMENTS	7	---
SANDSTONE	12	119
CHALK	2	2
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	5	17
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9611 1.5X1.5M - Level 1
SW CORNER 370 N -40E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	136	[illegible]
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	5	9
CHALK	1	2
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	6	5
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9612 1.5X1.5M - Level 2
SW CORNER 370 N -40E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	181	164
CRACKED COBBLE FRAGMENTS	14	---
SANDSTONE	3	38
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	7
LIMONITE	3	3
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9613 1.5X1.5M - Level 3
SW CORNER 370 N -40E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	193	257
CRACKED COBBLE FRAGMENTS	8	---
SANDSTONE	4	48
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	0
LIMONITE	5	34
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9614 1.5X1.5M - Level 1
SW CORNER 330 N -20E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	533	614
CRACKED COBBLE FRAGMENTS	24	---
SANDSTONE	11	14
CHALK	1	4
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	11	7
LIMONITE	7	5
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9615 1.5X1.5M - Level: 2
SW CORNER 330 N -20E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	458	671
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	4	18
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	235
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9616 1.5X1.5M - Level 1
SW CORNER 380 N -34E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	690	750
CRACKED COBBLE FRAGMENTS	22	---
SANDSTONE	11	62
CHALK	2	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	8
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1Pi133. Debitage From Excavation Units (Continued).

USN: 9617 1.5X1.5M - Level [illegible]
SW CORNER 390 N -34E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	592	1392
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	3	12
CHALK	5	10
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	2
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9618 1.5X1.5M - Level 3
SW CORNER 390 N -34E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	186	435
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	5	44
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	10	35
BRECCIA	---	---
HEMATITE	3	19
LIMONITE	2	3
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9619 1.5X1.5M - Level 1
SW CORNER 390 N -41E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	485	436
CRACKED COBBLE FRAGMENTS	19	---
SANDSTONE	1	165
CHALK	5	2
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	6
LIMONITE	1	5
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	0

USN: 9620 1.5X1.5M - Level 2
SW CORNER 390 N -41E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	229	240
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	11	69
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	5	8
LIMONITE	3	2
PETRIFIED WOOD	1	14
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9621 1.5X1.5M - Level [illegible]
SW CORNER 380 N 5E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	191	243
CRACKED COBBLE FRAGMENTS	76	---
SANDSTONE	8	17
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	2	18
BRECCIA	1	3
HEMATITE	2	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	3	4

USN: 9622 1.5X1.5M - Level 2
SW CORNER 380 N 5E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	474	606
CRACKED COBBLE FRAGMENTS	161	---
SANDSTONE	40	81
CHALK	2	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	5	4
LIMONITE	19	3
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	--	---

USN: [illegible] 1.5X1.5M - Level 1
SW CORNER 383 N -23E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	424	624
CRACKED COBBLE FRAGMENTS	25	---
SANDSTONE	6	22
CHALK	5	6
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	10	45
LIMONITE	8	5
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9624 1.5X1.5M - Level 2
SW CORNER 383 N -23E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	242	320
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	3	47
CHALK	---	---
LIMESTONE	2	4
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	12	51
LIMONITE	---	---
PETRIFIED WOOD	2	3
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9625 1.5X1.5M - Level 1
SW CORNER 383 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	64	100
CRACKED COBBLE FRAGMENTS	24	---
SANDSTONE	13	25
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	--
BRECCIA	---	---
HEMATITE	2	1
LIMONITE	---	
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9525 1.5X1.5M - Level 2
SW CORNER 383 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	196	222
CRACKED COBBLE FRAGMENTS	16	---
SANDSTONE	7	17
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	4
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9627 1.5X1.5M - Level 1
SW CORNER 389 N 26E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	322	427
CRACKED COBBLE FRAGMENTS	122	---
SANDSTONE	36	67
CHALK	---	---
LIMESTONE	2	2
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	7	1
LIMONITE	7	2
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9623 1.5X1.5M - Level 1
SW CORNER 390 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	147	145
CRACKED COBBLE FRAGMENTS	7	---
SANDSTONE	11	48
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	4
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1Pi33. Debitage From Excavation Units (Continued).

USN: 9629 1.5X1.5M - Level 2
SW CORNER 390 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	[illegible]	237
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	5	22
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	3
LIMONITE	---	---
PETRIFIED WOOD	1	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	4	4

USN: 96[illegible] 1.5X1.5M - Level 1
SW CORNER 395 N -18E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	297	282
CRACKED COBBLE FRAGMENTS	[illegible]	---
SANDSTONE	4	31
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	[illegible]
HEMATITE	7	4
LIMONITE	---	---
PETRIFIED WOOD	1	[illegible]
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] 1.5X1.5M - Level 2
SW CORNER 395 N -15E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	725	[illegible]
CRACKED COBBLE FRAGMENTS	[illegible]	---
SANDSTONE	16	100
CHALK	---	---
LIMESTONE	1	1
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	[illegible]	[illegible]
LIMONITE	43	8
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	10

USN: 9633 1.5X1.5M - Level [illegible]
SW CORNER 396 N -32E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	403	167
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	12	45
CHALK	1	0
LIMESTONE	---	---
CONGLOMERATE	1	1
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	3	3
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9634 1.5X1.5M - Level 2
SW CORNER 396 N -32E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	188	151
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	28
BRECCIA	---	---
HEMATITE	9	5
LIMONITE	---	---
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9635 1.5X1.5M - Level [illegible]
SW CORNER 396 N -32E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	216	214
CRACKED COBBLE FRAGMENTS	4	---
SANDSTONE	4	13
CHALK	2	[illegible]
LIMESTONE	2	[illegible]
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	1
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] 1.5X1.5M - Level [illegible]
SW CORNER [illegible] N -32E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	17	5
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	9	142
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	20
LIMONITE	1	1
PETRIFIED WOOD	2	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9637 1.5X1.5M - Level 1
SW CORNER 399 N -44E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	52	72
CRACKED COBBLE FRAGMENTS	16	---
SANDSTONE	6	6
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	1	1
BRECCIA	---	---
HEMATITE	5	10
LIMONITE	---	---
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9639 1.5X1.5M - Level 2
SW CORNER 399 N -44E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	47	64
CRACKED COBBLE FRAGMENTS	9	---
SANDSTONE	4	17
CHALK	1	0
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	7	10
LIMONITE	1	0
PETRIFIED WOOD	1	0
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] 1.5X1.5M - Level 3
SW CORNER 395 N -44E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	157	155
CRACKED COBBLE FRAGMENTS	18	---
SANDSTONE	14	39
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	2
LIMONITE	6	71
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9642 1.5X1.5M - Level 1
SW CORNER 402 N -17E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	556	646
CRACKED COBBLE FRAGMENTS	18	---
SANDSTONE	16	44
CHALK	2	0
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	2	26
HEMATITE	7	[illegible]
LIMONITE	4	2
PETRIFIED WOOD	1	[illegible]
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9643 1.5X1.5M - Level 2
SW CORNER 402 N -17E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	---	957
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	13	54
CHALK	4	4
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	1	15
HEMATITE	1	2
LIMONITE	5	2
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1P133. Debitage From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level 1
SW CORNER 402 N 9E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	149	216
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	7	10
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	2	5
BRECCIA	---	---
HEMATITE	3	2
LIMONITE	4	2
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	-

USN: 9645 1.5X1.5M - Level 2
SW CORNER 402 N 9E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	261	285
CRACKED COBBLE FRAGMENTS	6	---
SANDSTONE	7	32
CHALK	3	2
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	2
LIMONITE	6	29
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	2

USN: 9646 1.5X1.5M - Level 1
SW CORNER 402 N 9E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	81	82
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	2
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9648 1.5X1.5M - Level 1
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	532	649
CRACKED COBBLE FRAGMENTS	13	---
SANDSTONE	11	68
CHALK	1	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	6	15
LIMONITE	16	71
PETRIFIED WOOD	1	12
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9649 1.5X1.5M - Level 2
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	110	113
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	3	26
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	3
LIMONITE	1	2
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9650 1.5X1.5M - Level 3
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	44	37
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	57	---
CHALK	1	0
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	43	149
LIMONITE	---	---
PETRIFIED WOOD	22	71
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9651 1.5X1.5M - Level 4
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	---	---
CRACKED COBBLE FRAGMENTS	---	67
SANDSTONE	3	4
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	6	9
LIMONITE	---	---
PETRIFIED WOOD	3	2
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9652 1.5X1.5M - Level 5
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	3	2
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	2	8
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9654 1.5X1.5M - Level 6
SW CORNER 407 N 3E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	1	0
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	3	2
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9655 1.5X1.5M - Level 1
SW CORNER 405 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	403	692
CRACKED COBBLE FRAGMENTS	12	---
SANDSTONE	1	54
CHALK	1	23
LIMESTONE	---	---
CONGLOMERATE	2	24
BRECCIA	---	---
HEMATITE	5	17
LIMONITE	8	3
PETRIFIED WOOD	4	33
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9656 1.5X1.5M - Level 2
SW CORNER 405 N 2E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	326	452
CRACKED COBBLE FRAGMENTS	11	---
SANDSTONE	3	22
CHALK	1	0
LIMESTONE	---	---
CONGLOMERATE	1	7
BRECCIA	---	---
HEMATITE	1	9
LIMONITE	4	95
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9653 1.5X1.5M - Level 1
SW CORNER 405 N 41E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	215	240
CRACKED COBBLE FRAGMENTS	7	---
SANDSTONE	3	49
CHALK	1	1
LIMESTONE	2	3
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	6
LIMONITE	5	2
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1Pi33. Debitage From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level 2
SW CORNER 405 N 41E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	38	49
CRACKED COBBLE FRAGMENTS	[illegible]	1
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	---
LIMONITE	---	---
PETRIFIED WOOD	1	0
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9663 1.5X1.5M - Level 1
SW CORNER 430 N -37E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	44	80
CRACKED COBBLE FRAGMENTS	10	---
SANDSTONE	7	250
CHALK	1	1
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9661 1.5X1.5M - Level 2
SW CORNER 410 N -37E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	[illegible]	20
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	2	6
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9662 1.5X1.5M - Level 3
SW CORNER 430 N -37E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	24	22
CRACKED COBBLE FRAGMENTS		---
SANDSTONE	1	0
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	10
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9663 1.5X1.5M - Level 4
SW CORNER 430 N -37E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	3	6
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	1	1
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9664 1.5X1.5M - Level 1
SW CORNER 447 N 27E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	16	15
CRACKED COBBLE FRAGMENTS	5	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	5	5
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] 1.5X1.5M - Level 2
SW CORNER 447 N 27E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	12	10
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	1
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9666 1.5X1.5M - Level 3
SW CORNER 447 N 27E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	38	34
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	1	1
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	6
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: [illegible] 1.5X1.5M - Level 4
SW CORNER 447 N 27E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	2	1
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	2	2
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9668 1.5X1.5M - Level 1
SW CORNER 465 N 24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	77	88
CRACKED COBBLE FRAGMENTS	8	---
SANDSTONE	1	1
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	3
LIMONITE	2	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9669 1.5X1.5M - Level 2
SW CORNER 465 N 24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	64	79
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	2	10
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	3
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9671 1.5X1.5M - Level 3
SW CORNER 465 N 24E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	3	1
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	1	1
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 66. Site 1Pi33. Debitage From Excavation Units (Continued).

USN: 9671 1.5X1.5M - Level 1
SW CORNER 485 N 53E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	1	13
CRACKED COBBLE FRAGMENTS	2	---
SANDSTONE	2	2
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	3	2
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	1	1

USN: 9672 1.5X1.5M - Level 2
SW CORNER 485 N 53E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	4	2
CRACKED COBBLE FRAGMENTS	1	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	2	3
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9673 1.5X1.5M - Level 3
SW CORNER 485 N 53E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	3	4
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9674 1.5X1.5M - Level 4
SW CORNER 485 N 53E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	4	---
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	---	---
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9675 1.5X1.5M - Level 1
SW CORNER 486 N -23E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	15	29
CRACKED COBBLE FRAGMENTS	3	---
SANDSTONE	2	5
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	4	2
LIMONITE	1	1
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

USN: 9676 1.5X1.5M - Level 2
SW CORNER 486 N -23E

	UNMODIFIED COUNT	INTRODUCED ROCK WEIGHT GMS
FIRE CRACKED/CRAZED CHERT	15	---
CRACKED COBBLE FRAGMENTS	---	---
SANDSTONE	---	---
CHALK	---	---
LIMESTONE	---	---
CONGLOMERATE	---	---
BRECCIA	---	---
HEMATITE	1	[illegible]
LIMONITE	---	---
PETRIFIED WOOD	---	---
FIRE CRACKED ROCK	---	---
OTHER UNMODIFIED ROCK	---	---

Table 67. Site 1Pi33. Debitage From Features.

USN: [illegible] FEATURE [illegible]
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9002 FEATURE 2
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	4	---	---
BIFACIAL THINNING FLAKE	---	1	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9003 FEATURE 3
SW CORNER [illegible] ---

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	--	---	---
UTILIZED FLAKE	---	---	11	---	---
PRIMARY DECORTI-CATION FLAKE	1	---	12	---	---
SECONDARY DECOR-TICATION FLAKE	20	---	62	---	---
BIFACIAL THINNING FLAKE	6	2	23	---	---
OTHER FLAKE	---	---	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	4	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9634 FEATURE 6-LEVEL 1
SW CORNER 444N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	2	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9685 FEATURE 6-LEVEL 2
SW CORNER 488N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	[illegible]	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	---	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BLADE	---	--	--	---	---
OTHER	---	---	---	---	---

USN: 9681 FEATURE 6-LEVEL 1
SW CORNER 488N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	-	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	--	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9682 FEATURE 6-LEVEL 2
SW CORNER 488N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	2	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 96[illegible]3 FEATURE 6-LEVEL 3
SW CORNER 488N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	7	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	5	---	---
SECONDARY DECOR-TICATION FLAKE	5	---	53	---	---
BIFACIAL THINNING FLAKE	---	---	31	---	---
OTHER FLAKE	1	---	5	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9686 FEATURE 6-LEVEL 3
SW CORNER 484N -21E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	12	---	---
PRIMARY DECORTI-CATION FLAKE	[illegible]	---	5	---	---
SECONDARY DECOR-TICATION FLAKE	6	---	26	---	---
BIFACIAL THINNING FLAKE	1	---	11	---	---
OTHER FLAKE	1	2	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9687 FEATURE 6-LEVEL 1
SW CORNER 443N -24E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	2	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 67. Site 1P133. Debitage From Features (Continued).

USN: 9691 FEATURE 5-LEVEL 2
SW CORNER 443N -24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	---	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 5693 FEATURE 6-LEVEL 3
SW CORNER 443N -24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	6	---	---
PRIMARY DECORTICATION FLAKE	2	---	5	---	---
SECONDARY DECORTICATION FLAKE	3	---	26	---	---
BIFACIAL THINNING FLAKE	5	---	12	--	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9693 FEATURE 6-LEVEL 1
SW CORNER 488N -24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9691 FEATURE 6-LEVEL 2
SW CORNER 488N -24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	3	---	---
SECONDARY DECORTICATION FLAKE	1	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	4	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9692 FEATURE 6-LEVEL 3
SW CORNER 488N -24E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	5	---	---
SECONDARY DECORTICATION FLAKE	2	---	20	---	---
BIFACIAL THINNING FLAKE	3	---	5	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	--	1	---	---
BLADE	---	---	---	---	---
OTHER	--	---	1	--	---

USN: 9093 FEATURE 6A
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9006 FEATURE 7
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	4	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9007 FEATURE 8
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9009 FEATURE 9-BURIAL 2
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	1	---	---
UTILIZED FLAKE	2	---	12	---	---
PRIMARY DECORTICATION FLAKE	2	---	6	---	---
SECONDARY DECORTICATION FLAKE	13	---	53	---	---
BIFACIAL THINNING FLAKE	7	---	17	---	---
OTHER FLAKE	1	---	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9003 FEATURE 10-BURIAL 3
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	2	---	---
SECONDARY DECORTICATION FLAKE	---	---	3	[illegible]	---
BIFACIAL THINNING FLAKE	---	---	4	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---

Table 67. Site 1Pi33. Debitage From Features (Continued).

USN: 9010 FEATURE 11-BURIAL 4
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTI-CATION FLAKE	1	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	2	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9011 FEATURE 12-BURIAL 5
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	11	---	---
BIFACIAL THINNING FLAKE	---	---	5	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9012 FEATURE 13-BURIAL 6
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	5	---	---
BLADE CORE	---	---	--	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	---	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9014 FEATURE 15-BURIAL 11
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	7	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	3	---	---
SECONDARY DECOR-TICATION FLAKE	6	---	21	---	---
BIFACIAL THINNING FLAKE	4	---	17	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9015 FEATURE 16-BURIAL 17
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	3	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	4	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---

USN: 9016 FEATURE 17-BURIAL 13
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	---	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9017 FEATURE 18
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	1	---	---
SECONDARY DECOR-TICATION FLAKE	3	---	12	---	---
BIFACIAL THINNING FLAKE	2	---	7	---	---
OTHER FLAKE	2	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9018 FEATURE 19-BURIAL 10
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	---	---	---
SECONDARY DECOR-TICATION FLAKE	1	---	5	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9019 FEATURE 20-BURIAL 14
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	9	---	---
PRIMARY DECORTI-CATION FLAKE	---	---	2	---	---
SECONDARY DECOR-TICATION FLAKE	1	---	14	---	---
BIFACIAL THINNING FLAKE	---	1	4	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9021 FEATURE 22-BURIAL 21
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	5	---	---
PRIMARY DECORTI-CATION FLAKE	3	---	5	---	---
SECONDARY DECOR-TICATION FLAKE	8	---	28	---	---
BIFACIAL THINNING FLAKE	1	---	20	---	---
OTHER FLAKE	---	---	6	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---

Table 67. Site 1Pi133. Debitage From Features (Continued).

USN: 9023 FEATURE 24-BURIAL [illegible]
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	3	---	57	---	---
PRIMARY DECORTICATION FLAKE	3	---	10	---	---
SECONDARY DECORTICATION FLAKE	11	---	121	---	---
BIFACIAL THINNING FLAKE	2	---	63	---	---
OTHER FLAKE	2	---	10	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	8	---	---
BLADE	---	---	---	---	---
OTHER	---	---	9	---	---

USN: 9024 FEATURE 25-BURIAL 9
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	3	---	27	---	---
BIFACIAL THINNING FLAKE	2	---	4	---	---
OTHER FLAKE	1	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9025 FEATURE 26
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	3	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9026 FEATURE 27
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	1	---	15	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9027 FEATURE 28
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	8	---	---
BIFACIAL THINNING FLAKE	---	---	3	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	1	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9028 FEATURE 29
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	---	---	6	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9029 FEATURE 30-BURIAL 22
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	1	---	7	---	---
BIFACIAL THINNING FLAKE	---	---	3	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9030 FEATURE 31-BURIAL 24
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	15	---	[illegible]	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	1	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	1	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9031 FEATURE 32
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	2	---	5	---	---
SECONDARY DECORTICATION FLAKE	8	---	47	---	---
BIFACIAL THINNING FLAKE	1	---	8	---	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9033 FEATURE 34
SW CORNER ---N ---E

UNMODIFIED LITHICS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	1	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	2	---	---
BIFACIAL THINNING FLAKE	---	---	2	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 67. Site 1Pi33. Debitage From Features (Continued).

USN: 9034 FEATURE 35-BURIAL 23
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTICATION FLAKE	---	---	2	---	---
SECONDARY DECORTICATION FLAKE	2	---	20	---	---
BIFACIAL THINNING FLAKE	---	---	9	---	---
OTHER FLAKE	2	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9035 FEATURE 36-BURIAL 26
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	1	---	1	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9036 FEATURE 37
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	---	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9037 FEATURE 38
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	---	---	---	---	---
SECONDARY DECORTICATION FLAKE	---	---	---	---	---
BIFACIAL THINNING FLAKE	---	---	---	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9039 FEATURE 40
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	---	---	---
PRIMARY DECORTICATION FLAKE	---	---	1	---	---
SECONDARY DECORTICATION FLAKE	1	---	5	---	---
BIFACIAL THINNING FLAKE	---	---	1	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9040 FEATURE 41-BURIAL 15
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	7	---	---
PRIMARY DECORTICATION FLAKE	9	---	16	---	---
SECONDARY DECORTICATION FLAKE	39	1	179	---	---
BIFACIAL THINNING FLAKE	25	3	62	---	---
OTHER FLAKE	5	4	16	---	---
AMORPHOUS FLAKE	---	---	1	---	---
BLADE-LIKE FLAKE	---	---	9	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9041 FEATURE 42-BURIAL 15
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	25	---	---
PRIMARY DECORTICATION FLAKE	4	1	5	---	---
SECONDARY DECORTICATION FLAKE	27	---	77	---	---
BIFACIAL THINNING FLAKE	6	---	38	---	---
OTHER FLAKE	4	2	[illegible]	---	---
AMORPHOUS FLAKE	---	1	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	3	---	---

USN: 9042 FEATURE 43-BURIAL 27
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	[illegible]	---	---
PRIMARY DECORTICATION FLAKE	2	---	4	---	---
SECONDARY DECORTICATION FLAKE	13	---	48	---	---
BIFACIAL THINNING FLAKE	2	1	10	---	---
OTHER FLAKE	---	1	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9043 FEATURE 44-BURIAL 16
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	5	---	---
PRIMARY DECORTICATION FLAKE	2	---	5	---	---
SECONDARY DECORTICATION FLAKE	3	---	48	---	---
BIFACIAL THINNING FLAKE	4	---	30	---	---
OTHER FLAKE	---	---	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9044 FEATURE 45-BURIAL 17
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	5	---	---
PRIMARY DECORTICATION FLAKE	---	---	15	---	---
SECONDARY DECORTICATION FLAKE	4	---	105	---	---
BIFACIAL THINNING FLAKE	5	2	54	---	---
OTHER FLAKE	---	---	9	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	5	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

Table 67. Site 1Pi133. Debitage From Features (Continued).

USN: 9045 FEATURE 46-BURIAL 19
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	1	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	1	24	---	---
PRIMARY DECORTICATION FLAKE	1	---	10	---	---
SECONDARY DECORTICATION FLAKE	10	---	133	---	---
BIFACIAL THINNING FLAKE	9	1	54	---	---
OTHER FLAKE	3	2	14	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	3	---	---
BLADE	---	---	---	---	---
OTHER	---	---	6	---	---

USN: 9046 FEATURE 47
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	5	---	---
PRIMARY DECORTICATION FLAKE	3	---	19	---	---
SECONDARY DECORTICATION FLAKE	18	---	255	---	---
BIFACIAL THINNING FLAKE	13	13	152	---	---
OTHER FLAKE	5	1	21	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	19	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9047 FEATURE 48-BURIAL 20
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	[illegible]	---	---
PRIMARY DECORTICATION FLAKE	7	---	18	---	---
SECONDARY DECORTICATION FLAKE	32	---	156	---	---
BIFACIAL THINNING FLAKE	20	1	116	---	---
OTHER FLAKE	3	---	17	---	---
AMORPHOUS FLAKE	---	2	---	---	---
BLADE-LIKE FLAKE	---	---	8	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9048 FEATURE 49-BURIAL 28
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	14	---	---
PRIMARY DECORTICATION FLAKE	4	1	11	---	---
SECONDARY DECORTICATION FLAKE	10	---	69	---	---
BIFACIAL THINNING FLAKE	8	1	21	---	---
OTHER FLAKE	---	---	3	---	---
AMORPHOUS FLAKE	---	2	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9049 FEATURE 50-BURIAL 29
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	23	---	---
PRIMARY DECORTICATION FLAKE	1	---	8	---	---
SECONDARY DECORTICATION FLAKE	---	1	82	---	---
BIFACIAL THINNING FLAKE	2	1	15	---	---
OTHER FLAKE	1	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9050 FEATURE 51-BE12
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	1	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	72	---	---
PRIMARY DECORTICATION FLAKE	17	---	107	---	---
SECONDARY DECORTICATION FLAKE	36	---	497	---	---
BIFACIAL THINNING FLAKE	42	6	250	---	---
OTHER FLAKE	12	1	51	---	---
AMORPHOUS FLAKE	1	---	4	---	---
BLADE-LIKE FLAKE	---	---	5	---	---
BLADE	---	---	---	---	---
OTHER	---	---	5	---	---

USN: 9051 FEATURE 51A
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	1	---	---
PRIMARY DECORTICATION FLAKE	7	---	34	---	---
SECONDARY DECORTICATION FLAKE	9	---	215	---	---
BIFACIAL THINNING FLAKE	7	---	127	---	---
OTHER FLAKE	1	1	27	---	---
AMORPHOUS FLAKE	1	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9052 FEATURE 51B
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	15	---	---
PRIMARY DECORTICATION FLAKE	14	---	172	---	---
SECONDARY DECORTICATION FLAKE	36	---	730	---	---
BIFACIAL THINNING FLAKE	104	---	412	---	---
OTHER FLAKE	9	2	96	---	---
AMORPHOUS FLAKE	1	---	3	---	---
BLADE-LIKE FLAKE	1	---	9	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9053 FEATURE 51C
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	24	---	58	---	---
SECONDARY DECORTICATION FLAKE	24	---	223	---	---
BIFACIAL THINNING FLAKE	28	3	121	---	---
OTHER FLAKE	9	---	35	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9054 FEATURE 51D
SW CORNER ---N ---E

	UNMODIFIED LITHICS				
	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	1	---	---
PRIMARY DECORTICATION FLAKE	---	---	11	---	---
SECONDARY DECORTICATION FLAKE	1	---	38	---	---
BIFACIAL THINNING FLAKE	2	---	17	---	---
OTHER FLAKE	2	---	8	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

Table 67. Site 1Pi33. Debitage From Features (Continued).

USN: 9056 FEATURE 53-BURIAL 30
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	24	---	---
PRIMARY DECORTICATION FLAKE	3	---	13	---	---
SECONDARY DECORTICATION FLAKE	6	---	75	---	---
BIFACIAL THINNING FLAKE	3	1	45	---	---
OTHER FLAKE	2	---	10	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9057 FEATURE 54-BURIAL 31
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	1	---	6	---	---
SECONDARY DECORTICATION FLAKE	3	---	41	---	---
BIFACIAL THINNING FLAKE	2	---		---	---
OTHER FLAKE	1	1	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	1	---	---

USN: 9058 FEATURE 55-BURIAL 32
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	5	---	---
PRIMARY DECORTICATION FLAKE	2	---	2	---	---
SECONDARY DECORTICATION FLAKE	4	---	16	---	---
BIFACIAL THINNING FLAKE	---	1	7	---	---
OTHER FLAKE	---	---	---	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	1	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9059 FEATURE 56-BURIAL 33
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	6	---	---
PRIMARY DECORTICATION FLAKE	---	---	7	---	---
SECONDARY DECORTICATION FLAKE	13	2	82	---	---
BIFACIAL THINNING FLAKE	4	---	36	---	---
OTHER FLAKE	---	---	4	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	2	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9060 FEATURE 57-BURIAL 34
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	2	---	---
PRIMARY DECORTICATION FLAKE	1	---	1	---	---
SECONDARY DECORTICATION FLAKE	3	---	15	---	---
BIFACIAL THINNING FLAKE	4	---	13	---	---
OTHER FLAKE	---	---	1	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---

USN: 9062 FEATURE 59-BURIAL 35
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	8	---	---
PRIMARY DECORTICATION FLAKE	2	---	7	---	---
SECONDARY DECORTICATION FLAKE	2	---	43	---	---
BIFACIAL THINNING FLAKE	7	---	28	---	---
OTHER FLAKE	---	---	8	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	6	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9063 FEATURE 60-BURIAL 36
SW CORNER ---N ---E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	---	---	3	---	---
PRIMARY DECORTICATION FLAKE	---	---	4	---	---
SECONDARY DECORTICATION FLAKE	---	---	17	---	---
BIFACIAL THINNING FLAKE	2	---	16	---	---
OTHER FLAKE	---	---	7	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	---	---	---
BLADE	---	---	---	---	---
OTHER	---	---	---	---	---

USN: 9702 ZONE A-STRUCTURE 2
SW CORNER 402N -1E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	18	---	---
PRIMARY DECORTICATION FLAKE	2	---	12	---	---
SECONDARY DECORTICATION FLAKE	7	---	76	---	---
BIFACIAL THINNING FLAKE	6	1	46	---	---
OTHER FLAKE	2	---	7	---	---
AMORPHOUS FLAKE	1	1	---	---	---
BLADE-LIKE FLAKE	1	---	4	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9703 ZONE B-STRUCTURE 2
SW CORNER 402N -1E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	---	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	1	---	3	---	---
PRIMARY DECORTICATION FLAKE	---	---	8	---	---
SECONDARY DECORTICATION FLAKE	2	---	38	---	---
BIFACIAL THINNING FLAKE	2	---	32	---	---
OTHER FLAKE	---	---	2	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	4	---	---
BLADE	---	---	---	---	---
OTHER	---	---	2	---	---

USN: 9704 ZONE C-STRUCTURE 2
SW CORNER 402N -1E

	UNMODIFIED LITHICS NOT HEAT TREATED LOCAL	EXOTIC	HEAT TREATED LOCAL	EXOTIC	WEIGHT GMS
PRIMARY CORE	---	---	1	---	---
SECONDARY CORE	---	---	---	---	---
BLADE CORE	---	---	---	---	---
UTILIZED FLAKE	2	---	12	---	---
PRIMARY DECORTICATION FLAKE	2	---	16	---	---
SECONDARY DECORTICATION FLAKE	15	---	152	---	---
BIFACIAL THINNING FLAKE	21	---	66	---	---
OTHER FLAKE	3	---	3	---	---
AMORPHOUS FLAKE	---	---	---	---	---
BLADE-LIKE FLAKE	---	---	5	---	---
BLADE	---	---	---	---	---

Table 68. Site 1Pi33. Flaked Stone Tools From Excavation Units.

USN: 9605 1.5X1.5M - Level 1
SW CORNER 329N -17E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	1	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9606 1.5X1.5M - Level 2
SW CORNER 329N -17E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	1	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	-
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9607 1.5X1.5M - Level 1
SW CORNER 329N -46E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9608 1.5X1.5M - Level 2
SW CORNER 329N -46E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9609 1.5X1.5M - Level 1
SW CORNER 367N -5E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	2	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9610 1.5X1.5M - Level 2
SW CORNER 367N -5E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	1	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	1	--	3	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9611 1.5X1.5M - Level 1
SW CORNER 370N -40E

BIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT LOCAL	TREATED EXOTIC	HEAT LOCAL	TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: [illegible] 1.5X1.5M - Level [illegible]
SW CORNER 370N -40E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	[illegible]	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9611 1.5X1.5M - Level 3
SW CORNER 370N -40E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9615 1.5X1.5M - Level 1
SW CORNER 380N -20E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	3	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9615 1.5X1.5M - Level 2
SW CORNER 380N -20E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	1	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9616 1.5X1.5M - Level 1
SW CORNER 380N -34E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	1	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	3	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9617 1.5X1.5M - Level 2
SW CORNER 390N -34E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	1	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9613 1.5X1.5M - Level 1
SW CORNER 380N -41E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

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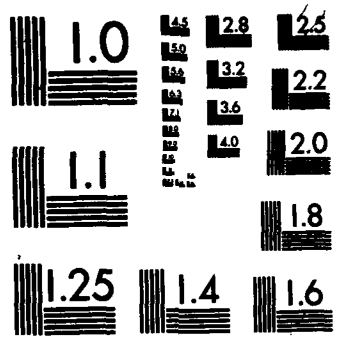

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: [illegible]
SW CORNER [illegible] -41E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9621 1.5X1.5M - Level 1
SW CORNER 380N 4E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	6	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	4	--

USN: 9622 1.5X1.5M - Level 2
SW CORNER 390N 9E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	3	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	2	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	2	--
OTHER	--	--	8	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	3	--
KNIVES	--	--	1	--
GRAVERS	--	--	--	--
PERFORATORS	1	--	--	--
OTHER	--	--	3	--

USN: 9623 1.5X1.5M - Level 1
SW CORNER 343N -23E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9624 1.5X1.5M - Level 2
SW CORNER 343N -23E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9625 1.5X1.5M - Level 1
SW CORNER 333N 2E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: [illegible]626 1.5X1.5M - Level 2
SW CORNER 383N 2E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: 9627 1.5X1.5M - Level 1
SW CORNER 389N 2E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	6	--
KNIVES	--	--	1	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9628 1.5X1.5M - Level 1
SW CORNER 390N 2E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9629 1.5X1.5M - Level 2
SW CORNER 390N 2E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9631 1.5X1.5M - Level 1
SW CORNER 395N -18E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	3	--
OTHER	--	--	2	--
[illegible]	--			

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9632 1.5X1.5M - Level 2
SW CORNER 395N -18E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	1	--	1	--

USN: 9633 1.5X1.5M - Level 1
SW CORNER 396N -32E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	2	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9639 1.5X1.5M - Level 1
SW CORNER 399N -44E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	--	--
OTHER	1	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	1	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	1	--
OTHER	--	--	--	--

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: 9643 1.5X1.5M - Level 1
SW CORNER 402N -17E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	1	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	2	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9643 1.5X1.5M - Level 2
SW CORNER 402N -17E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	2	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	2	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	--	-
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	1	--
OTHER	--	--	1	--

USN: 9645 1.5X1.5M - Level 1
SW CORNER 402N 9E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	1	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9645 1.5X1.5M - Level 2
SW CORNER 402N 9E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	--	--
OTHER	1	--	5	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	1	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9645 1.5X1.5M - Level 3
SW CORNER 402N 9E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9641 1.5X1.5M - Level 1
SW CORNER 407N 3E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	1	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	1	5	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 964? 1.5X1.5M - Level 2
SW CORNER 407N 3E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	1	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: 9659 1.5X1.5M - Level 1
SW CORNER 409N 2E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	4	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	2	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	1	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9659 1.5X1.5M - Level 2
SW CORNER 409N 2E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9653 1.5X1.5M - Level 1
SW CORNER 409N 41E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9663 1.5X1.5M - Level 1
SW CORNER 430N -37E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9662 1.5X1.5M - Level 2
SW CORNER 430N -37E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9505 1.5X1.5M - Level 1
SW CORNER 447N 27E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9664 1.5X1.5M - Level 1
SW CORNER 465N 24E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

Table 68. Site 1Pi133. Flaked Stone Tools From Excavation Units (Continued).

USN: 96[illegible] 1.5X1.5M - Level 2
SW CORNER 4[illegible]5N 24E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9674 1.5X1.5M - Level 1
SW CORNER 4[illegible]5N 53E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9675 1.5X1.5M - Level 1
SW CORNER 4[illegible]N -23E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9683 1.5X1.5M - Level 1
SW CORNER 393N 2E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9683 1.5X1.5M - Level 2
SW CORNER 393N 2E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9683 1.5X1.5M - Level [illegible]
SW CORNER 393N 2E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 69. Site 1Pi133. Flake Stone Tools From Features.

USN: 9002 FEATURE 2
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9003 FEATURE 3
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9687 FEATURE 6-LEVEL 3
SW CORNER 483N -24E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9692 FEATURE 6-LEVEL 3
SW CORNER 488N -24E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	1	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9643 FEATURE 6-LEVEL 3
SW CORNER 498N -23E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	1	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9686 FEATURE 6-LEVEL 3
SW CORNER 494N -21E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	3	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9688 FEATURE 6-LEVEL 2
SW CORNER 483N -24E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 69. Site 1Pi133. Flaked Stone Tools From Features (Continued).

USN: 9033 FEATURE 5-BURIAL 2
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9009 FEATURE 10-BURIAL 3
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9016 FEATURE 15-BURIAL 11
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9015 FEATURE 16-BURIAL 17
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	1	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9017 FEATURE 14
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	1	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9013 FEATURE 19-BURIAL 10
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	1	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9019 FEATURE 20-BURIAL 14
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	-
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 69. Site 1Pi133. Flaked Stone Tools From Features (Continued).

USN: 9022 FEATURE 2[illegible]-BURIAL [illegible]
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9023 FEATURE 24-BURIAL 23
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	2	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	2	--
OTHER	--	--	2	--

USN: 9026 FEATURE 27
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9027 FEATURE 28
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9030 FEATURE 31-BURIAL 24
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	1	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9031 FEATURE 32
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	4	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9034 FEATURE 35-BURIAL 25
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

Table 69. Site 1Pi33. Flaked Stone Tools From Features (Continued).

USN: 9039 FEATURE 40
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	1	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9040 FEATURE 41-BURIAL 19
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	1	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	1	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	1	1	5	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9041 FEATURE 42-BURIAL 15
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	5	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9042 FEATURE 43-BURIAL 27
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	1	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9043 FEATURE 44-BURIAL 16
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9044 FEATURE 45-BURIAL 17
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	1	--
OTHER	1	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9043 FEATURE 46-BURIAL 18
SW CORNER ---N ---E

BIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	3	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS

	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	2	--

Table 69. Site 1Pi33. Flaked Stone Tools From Features (Continued).

USN: [illegible] FEATURE 47
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	1	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	4	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	1	--
OTHER	--	--	--	--

USN: 9047 FEATURE 48-BURIAL 20
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	3	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	2	--	4	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9044 FEATURE 49-BURIAL 23
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9049 FEATURE 50-BURIAL 29
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	3	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

USN: 9053 FEATURE 51-NIC
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	1	--	--	--
BLANKS	--	--	3	--
SCRAPERS	--	--	2	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	2	--
GRAVERS	--	--	--	--
MICROLITHS	3	--	15	--
OTHER	1	--	10	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	1	--
OTHER	--	--	3	--

USN: 9051 FEATURE 51A
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	1	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	8	--
OTHER	1	1	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	1	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9052 FEATURE 51B
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	3	--
SCRAPERS	--	--	1	--
KNIVES	1	--	3	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	1	--	1	--
GRAVERS	--	--	--	--
MICROLITHS	6	--	38	--
OTHER	1	--	10	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	1	--
OTHER	--	--	--	--

Table 69. Site 1Pi133. Flaked Stone Tools From Features (Continued).

USN: 9053 FEATURE 51C
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	1	--	4	--
OTHER	--	--	3	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	2	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	1	--	--	--

USN: 9054 FEATURE 51D
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	4	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	2	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9057 FEATURE 54-BURIAL 31
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9058 FEATURE 55-BURIAL 32
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	1	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9059 FEATURE 56-BURIAL 33
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	2	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	4	--
OTHER	--	--	2	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9060 FEATURE 57-BURIAL 34
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	--	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 9062 FEATURE 59-BURIAL 35
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	1	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED		HEAT TREATED	
	LOCAL	EXOTIC	LOCAL	EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	1	--

Table 69. Site 1Pi133. Flaked Stone Tools From Features (Continued).

USN: [illegible] FEATURE: [illegible]
SW CORNER ---N ---E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 4703 ZONE H-STRUCTURE 2
SW CORNER 402N -1E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	--	--
BLANKS	--	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	2	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	--	--	--	--
OTHER	--	--	--	--

USN: 4704 ZONE C-STRUCTURE 2
SW CORNER 402N -1E

BIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
PREFORMS	--	--	1	--
BLANKS	1	--	--	--
SCRAPERS	--	--	--	--
KNIVES	--	--	1	--
SCRAPERS/KNIVES	--	--	--	--
PERFORATORS	--	--	--	--
DRILLS	--	--	--	--
GRAVERS	--	--	--	--
MICROLITHS	--	--	--	--
OTHER	--	--	1	--
ADZES	--	--	--	--
HOES	--	--	--	--

UNIFACIAL TOOLS	NOT HEAT TREATED LOCAL	NOT HEAT TREATED EXOTIC	HEAT TREATED LOCAL	HEAT TREATED EXOTIC
SCRAPERS	--	--	--	--
KNIVES	--	--	--	--
GRAVERS	--	--	--	--
PERFORATORS	1	--	1	--
OTHER	--	--	--	--

Table 70. Site 1P133. Ground Stone From Excavation Units.

USN: 9615 1.5X1.5M-Level 1
SW CORNER 329N -17E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	--
OTHER	--

USN: 9616 1.5X1.5M-Level 2
SW CORNER 328N -17E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	1
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

USN: 9622 1.5X1.5M-Level 1
SW CORNER 380N 9E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	--
OTHER	1

USN: 9624 1.5X1.5M-Level 1
SW CORNER 383N -23E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	1
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

USN: 9626 1.5X1.5M-Level 2
SW CORNER 383N 2E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	1
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

USN: 9628 1.5X1.5M-Level 1
SW CORNER 390N 2E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	--
OTHER	--

USN: 9627 1.5X1.5M-Level 2
SW CORNER 390N 2E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	--
OTHER	--

USN: 9639 1.5X1.5M-Level 1
SW CORNER 399N -44E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	1
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	--
OTHER	1

USN: 9642 1.5X1.5M-Level 1
SW CORNER 402N -17E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	1

USN: 9641 1.5X1.5M-Level 2
SW CORNER 402N -17E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	1
PITTED STONES	10
OTHER	--

USN: 9645 1.5X1.5M-Level 3
SW CORNER 402N 9E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	2

USN: 9652 1.5X1.5M-Level 1
SW CORNER 407N 3E

GROUND STONE	COUNT
HAMMERSTONES	1
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

USN: 9655 1.5X1.5M-Level 1
SW CORNER 405N 2E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	1
MULLERS	--
ABRADERS	--
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

USN: 9673 1.5X1.5M-Level 1
SW CORNER 405N 53E

GROUND STONE	COUNT
HAMMERSTONES	--
ANVILS	--
METATES	--
MULLERS	--
ABRADERS	1
DISCOIDALS	--
HOES	--
SAWS	--
CELTS	--
PITTED STONES	--
OTHER	--

Table 71. Site 1Pi33. Ground Stone From Features.

	USN: 9003 FEATURE 3	USN: 902[illegible] FEATURE 25-BURIAL [illegible]	USN: 904[illegible] FEATURE 50-BURIAL [illegible]
SW CORNER	---N ---E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	--	--	--
METATES	--	--	--
MULLERS	--	--	--
ABRADERS	1	--	--
DISCOIDALS	--	--	1
HOES	--	--	--
SAWS	--	--	--
CELTS	--	--	--
PITTED STONES	--	--	--
OTHER	--	1	--

	USN: 9681 FEATURE 6-LEVEL 3	USN: 9041 FEATURE 47-BURIAL 15	USN: 9050 FEATURE 51-AE12
SW CORNER	455N -21E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	--	--	--
METATES	--	--	1
MULLERS	--	1	--
ABRADERS	--	--	--
DISCOIDALS	--	--	1
HOES	--	--	--
SAWS	--	--	--
CELTS	1	--	--
PITTED STONES	--	--	--
OTHER	1	1	4

	USN: 9685 FEATURE 6-LEVEL 2	USN: 9042 FEATURE 43-BURIAL 27	USN: 9052 FEATURE 51B
SW CORNER	484N -21E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	--	--	--
METATES	--	--	--
MULLERS	--	--	1
ABRADERS	1	1	1
DISCOIDALS	--	--	--
HOES	--	--	--
SAWS	--	--	--
CELTS	--	--	--
PITTED STONES	--	--	--
OTHER	--	4	2

	USN: 9014 FEATURE 19-BURIAL 11	USN: 9045 FEATURE 4[illegible]-BURIAL 18	USN: 9053 FEATURE 51C
SW CORNER	---N ---E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	--	--	--
METATES	1	--	--
MULLERS	--	--	--
ABRADERS	--	1	1
DISCOIDALS	--	--	--
HOES	--	--	--
SAWS	--	--	--
CELTS	--	--	--
PITTED STONES	--	--	--
OTHER	--	--	--

	USN: 9017 FEATURE 18	USN: 9046 FEATURE 47	USN: 9054 FEATURE 51C
SW CORNER	---N ---E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	--	--	--
METATES	--	--	--
MULLERS	--	--	--
ABRADERS	--	--	--
DISCOIDALS	--	--	--
HOES	--	--	--
SAWS	--	--	--
CELTS	1	--	--
PITTED STONES	--	--	--
OTHER	--	1	2

	USN: 9023 FEATURE 24-BURIAL 23	USN: 9047 FEATURE 48-BURIAL 20	USN: 9059 FEATURE 56-BURIAL 33
SW CORNER	---N ---E	---N ---E	---N ---E
GROUND STONE	COUNT	COUNT	COUNT
HAMMERSTONES	--	--	--
ANVILS	1	--	1
METATES	--	--	--
MULLERS	--	--	--
ABRADERS	--	1	1
DISCOIDALS	--	--	--
HOES	--	--	--
SAWS	--	--	--
CELTS	--	--	--
PITTED STONES	--	--	--
OTHER	1	--	1

APPENDIX 4

PROJECTILE POINT MORPHOLOGY: STEPS TOWARD A FORMAL ACCOUNT

Eugene M. Futato

Formal accounts consist of units and rules such that when the rules are applied to the units, a reasonable model of the subject phenomenon is produced. In this paper, the units are nominally defined terms and expressions. The rules are the general rules for nominal definition and rules of formation specifying how units in this account may be combined to form additional units.

The terms and expressions used in this study are introduced by nominal definition. The rules for nominal definition have been explained by Hempel (1952). Briefly stated, a nominal definition introduces a term, the definiendum, by stating its synonomy with another term or expression, the definiens, having a previously determined meaning. This previously determined meaning may consist of prior nominally defined terms or primitives. Primitives are the basic starting points for a system of definitions and are introduced at the outset. However, this should not be taken to mean that the meanings assigned to the primitives are arbitrary. They should be stated as explicitly as possible and should contain a maximum of empirical relevance. Since the definiens of a nominally defined term may contain only primitives or prior nominally defined terms, it follows that any nominally defined term must ultimately be reducible to, or replaceable by, a unique expression of primitives. This is Hempel's "Requirement of univocal eliminability of defined expressions" (p. 17).

The point may arise that since all nominally defined terms may be replaced by primitives, why use the nominally defined terms at all? The answers are multiple in nature, the first being purely practical. A sinble nominally defined term may reduce several lines of primitives to one word, and a definition containing several of these would be virtually unintelligible if expanded to a long passage of primitives. As an example, the fairly simple <u>basal</u> <u>plane</u> expanded to primitives is a formula which requires 97 primitives plus quantifiers grouped in 54 brackets (marking set addition) nested to the eighth order. Twenty-four operations of including or being proper subsets are also needed. It is obvious that "The most proximal transverse plane tangent to the base" is much more understandable. This example implies an additional set of rules which were used in combining the terms, but this will be discussed later.

The second benefit of a system of nominally defined terms is that the meaning of the term becomes precise and consistent. The term <u>base</u> is currently used with three distinct meanings. In a hypothetical discussion of the proximal portion of a broken Clovis point, we may see the artiface referred to as the <u>base</u> of the point. <u>Clovis</u> in general may be described as a ground <u>base</u> point, and one that has an incurvate <u>base</u>. Thus the term <u>base</u> may mean respectively:

1. An undetermined proximal portion,
2. The edges of an undetermined proximal portion,
3. A specific edge across the proximal end.

Thus we see that jargon, as an extension of natural language, contains certain ambiguities. These are what Hempel has discussed as determinancy, and as uniformity of usage (1952). Determinancy refers to how well determined the application of a term is to a single person. Returning to our above example, this is the consistency with which an individual can decide what should and should not be referred to as base. Uniformity of usage refers to the consistency with which multiple individuals judge the applicability of a term to the same example, i.e., whether or not all people will refer to one specific entity as base. As defined below, the term base will have only one interpretation.

Another benefit of using a system of nominal definitions is that the definitions must be built in an orderly manner without circularity, contradiction or inconsistency. This forces one to look at the subject material in new ways and ofen reveals relationships not apparent in other ways. Finally, nominal definitions may be used to define classes, rather than to describe groups. Classes are the necessary and sufficient criteria for class membership and are invariant. The characteristics of a group as a whole are not invariant, as they may change with the addition or deletion of successive members.

Domain Specifier

The first step is to specify the domain, or that area of study, to which the system is to be applied. It is of course preferable for this to be by definition, but in this case it is not. The following characterization will have to suffice for now:

Projectile Point = Any chipped stone artifact presumed to have been used, or usable, as the piercing end of an arrow, spear, dart or similar composite tool.

Primitives

The more thoroughly a definition system is nested within an extant theoretical system, the greater the likelihood of generality. Thus, in a system of definitions dealing with shape, it is not surprising that most of the primitives needed are used in mathematics, particularly geometry. The term tip is included to present one starting place on the projectile point.

Property Terms

Point = A dimensionless geometric object having no property but location.

Straight Line = The shortest distance between two points.

Curve = A line that deviates from straightness in a smooth continuous fashion.

Vertex = A point at the intersection of two lines.

Tip = The most anterior point of a projectile point, considered a vertex.

Plane = Any two-dimensional locus of points.

Boundary = A border or limit.

Distance = The length of a line segment joining two points.

Beginning = The point at which something starts or is originated.

End = The point at which something ceases or is completed.

It is recognized that beginning and end are imprecise terms in that each must be relative to the other or some other reference point. However, definitions using these terms will contain instructions to the analyst which will remove any ambiguity.

Relation Terms

Perpendicular = Intersecting at or forming right angles.
Parallel = Being at an equal distance at every point.
Tangent = Touching but not intersecting.
Isomorphic = Identical in form.
Maximum = The greatest possible quantity, degree or number.
Minimum = The least possible quantity, degree or number.
Greater = A larger quantity, degree or number.
Lesser = A smaller quantity, degree or number.
Compound = Consisting of two or more parts.
Paired = Consisting of two corresponding parts.

Nominal Definitions

The nominal definitions are produced by combining the prior terms in certain ways. The operations are: set addition; inclusion as a proper subset; being a proper subset of; and exclusion. The quantifiers which may be used have indexical intent or are universal. Quantifiers with indexical intent have a single denotatum such as; a, one, the. Universal quantifiers have infinite denotata and may be positive or negative, respective examples being any, all; or no, none. Real numbers may also be used. These rules, plus the general rules for the formulation of nominal definitions previously summarized, are the basis for the nominal definitions which follow.

The following is a list of nominally defined terms to be used in the analysis of projectile point shape. Where further clarification or interpretation would be helpful it is presented verbally and/or by graphic

examples, but such analogies and examples <u>are</u> <u>not</u> themselves part of the definition. It is interesting to note that most of the terms below are taken from the current jargon, usually with a meaning very similar to the current meaning. This indicates that the jargon does contain a fair amount of empirical meaning but lacks precision and systematization.

The definitions are all in the form:

Definiendum = df. Definiens.

The symbol = df. is read as "equal by definition". Material following the symbol :: is any additional nondefinitional explication. The first set of nominally defined terms deals with reference points on, and the parts of projectile points.

Margin = df. The Maximum boundary of a projectile point.

Edge = df. Any portion of the margin.

Coronal = df. The plane which includes the margin.

Longitudinal = df. The plane perpendicular to the coronal which is the boundary of isomorphic parts of the projectile point.

Midline = df. The intersection of coronal and longitudinal planes.

Transverse = df. Any plane perpendicular to the midline at only one point.

Side = df. Either of two portions of the projectile point bounded by the longitudinal plane.

Face = df. Either of the two portions of the projectile point bounded by the coronal plane.

Proximal = df. At a greater distance from the tip along the midline.

Distal = df. At a lesser distance from the tip along the midline.

Medial = df. At a lesser distance from the midline.

Lateral = df. At a greater distance from the midline.

:: Note that Proximal and Distal are relative to the tip along the midline, not around the margin.

Midbase = df. The proximal intersection of midline and margin.

Base = df. Any edge beginning at the midbase and ending at the most lateral paired points on the margin not beyond the first vertex in either direction.

Basal = df. The most proximal transverse plane tangent to the base.

Junctures = df. The paired most distal points on the edge beginning at the most medial paired vertices not on the basal plane and ending at the next vertex on the margin moving initially toward the proximal end of the midline.

Haft Element = df. Any portion of the projectile point proximal to a straight line, beginning at one juncture and ending at the other.

Blade Element = df. All non-haft portions of the projectile point.

Blade Edge = df. The margin beginning at the tip and ending at the first encountered of: the most proximal and lateral vertex on the blade element other than the juncture; the juncture, or the base.

Shoulder = df. Any non-base margin extending medially from the proximal end of the blade edge and not ending proximally on the basal point.

Lateral Haft Element Edge = df. Any non-base, non-shoulder, margin on the haft element.

The nominal definitions thus far have dealt with various reference points on, and the edges and elements of, a projectile point. The definitions to follow are for terms dealing with shapes and orientation of various edges. These two concepts of shape and orientation are taken here to be separate, though interrelated. Shape is used in reference to the configuration of an edge; orientation is the way one edge is positioned with respect to some other edge or edges. Currently, such things as type of stem and type of shoulder are at times dependent on the shape of the edges involved and at times on the orinetation of the edges. Herein these concepts are dealt with separately.

Excurvate = df. Any adge which is the boundary of a greater area on the coronal plane than is a straight line between the same two points.

Incurvate = df. Any edge which is the boundary of a lesser area on the coronal plane than is a straight line between the same two points.

Recurvate = df. Any edge which is compound of at least one excurvate edge and one incurvate edge.

Angular = df. Any compound edge including at least one vertex.

Internal = df. Any angular edge which is the boundary of a lesser area on the coronal plane than is a straight line between the same two points.

External = df. Any angular edge which is the boundary of a greater area on the coronal plane than is a straight line between the same two points.

Horizontal = df. Any shoulder having both ends on the same trans-transverse plane.

Tapered = df. Any shoulder having the lateral end distal to the medial end.

Barbed = df. Any shoulder having the lateral end proximal to the medial end.

Expanding = df. Any lateral haft element edges, the distance between paired points becoming greater proximally.

Contracting = df. Any lateral haft element edges, the distance between paired points becoming lesser proximally.

Concave = df. Lateral haft element edges, the distance between paired points becoming lesser, than greater, proximally.

Convex = df. Lateral haft element edges, the distance between paired points becoming greater, then lesser, proximally.

The next set of definitions is for the classification of haft element modifications. That portion of the projectile point dealt with is quite variable as is the nature of the modification. The haft element modification may or may not include the shoulder, it may or may not include all or part of the base, depending of the type of modification involved and the exact form of a given specimen:

Haft Modification = df. Any edge between points on margin lying on a plane perpendicular to the coronal and tangent to the projectile point at the lateral end of one shoulder and the haft element, not including the midbase or tangent to the projectile point at the lateral end of both shoulders.

Laterally Modified Haft = df. Any projectile point having the ends of the haft modification on two planes either not tangent to the base or tangent to the base but not intersecting proximal to the junctures.

Basally Modified Haft = df. Any projectile point having the ends of haft modification on a plane tangent to the projectile point of the lateral end of the shoulders.

Diagonally Modified Haft = df. Any shouldered projectile point not laterally or basally modified.

Unmodified Haft = df. Any projectile point having a haft element and no shoulder.

Rules of Projectile Point Shape

The two rules of projectile point shape below are extensions of geometric rules. The purpose of these is to permit an interpretation of the previously defined terms in order to model the shape of projectile points.

Rule 1. The number of vertices and the number of edge segments on a projectile point must be equal.

This is an interpretation of a theorem of geometry which states that a polygon of N sides will have N angles.

Rule 2. Projectile point shapes are determined by the number of position of vertices and the shape of the edge segments between vertices.

Rule 2 is a logical extension of Rule 1. However, it may be interpreted to mean that the shape of a projectile point is made up of constituent parts and that by defining the number, shape and interrelation of the parts, we may define the shape of the whole.

The final nominal definition dealing with shape may now be introduced.

Vertex Class = df. The number of vertices on the margin excluding any vertex wholly on a single blade edge.

This is an interpreted vertex count which gives a rough indication of the complexity of shape. An earlier version of this account used a different interpreted vertex count (Futato 1977) that was designed as a more consistent indicator of shape complexity. However, vertex class as defined above is felt to be more useful. Excepting blade modifications, it produces a count of the number of edge segments on the artifact. There are logical and experiential bases for writing a synonomy between one edge segment and one manufacturing operation. Thus, the concept of vertex class provides a link between this model and models of manufacturing processes.

Classification of Projectile Point Shapes

The definitions and rules previously presented may be used to define the number, type, shape and orientation of parts of a projectile point. These definitions may be used in two distinct ways, classificatory or analytical. The first is application to a specific specimen to define the

shape of that specimen. This is the assignment of that specimen to a shape class, and is the method used in classifying a group of individual projectile points.

The second use of the definitions is in the creation of a desired class, regardless of whether or not there are any specimens. In the examination of any shape-related projectile point research problem, such as functional or temporal variation, a desired type may be created from the definitions and applied to the study material. For example, if one wanted to make a study of blade shape variability of a group of points, a type or set of types could be created which would define the shape of the artifacts in all variables but one, blade shape. Thus, the variance of blade shape would in each case be examined against a background of constants. This is a primary benefit of this analytical classification system. It permits any desired projectile point attribute(s) to be defined as a constant or set of constants against which the variability of other attributes may be measured. How can one examine the variability of blade shape within a point type, if several other attributes are also-variable? Then there is no standard of what is a variable, and with respect to waht else. The establishment of a constant research universe is fundamental to any study of variability or co-variability of attributes.

The classification of projectile points shape uses nine classes of data with several possible alternate choices under each. The nine classes are the vertex class, haft element, and shape and orientation of various edge segments. All of the terms used are nominally defined terms or primitives. Thus, the definition of a particular shape is a list of the attributes of shape which make up the point, an application of Rule 2. If the definition of each type seems excessively long, it should be noted that each can be reduced to an alpha-numeric code. For example: Vertex class - five; Haft element - laterally modified; Blade edge - straight; Base - straight, non-angular; Shoulder - incurvate, tapered; Lateral haft element edge - incurvate, expanding, may be written 5-L-S-S-N-I-T-I-Ep. Figure 12 is a key to the system of classification and also shows a set of abbreviations for the terms. Some examples of classification are shown in Figure 13.

This classificiation system produces a precise statement of the form of a type and facilitates the comparison of any two forms. The knowledge that some specimen is a Provisional Type 9, while another is a Kirk Corner Notched may be moderately intellectually satisfying and of some historical significance, but it reveals little about the nature of the morphological relationships of the two specimens. Typology by the system presented here, however, would specify the form of each specimen, facilitating any comparison.

Metric Attributes

The foregoing definition of projectile point shapes has dealt with the number, form and orientation of the component parts of a projectile point. It has not considered size and proportion of parts. In the illustration shown as Figure 14 the shape of each example is the same: Vertex class - Seven; Haft element - Diagonally modified; Blade edge - Straight;

Base - Straight, Non-angular; Shoulder - Straight, Horizontal; Lateral haft element edge - Straight, Parallel. The difference in shape is the relative size of the parts, and differentiation among these shapes will call for a metrical interpretation of some of the terms. This may be done with certain nominally defined terms for measurements which will permit the differentiation of shapes by size and proportion. The given examples are, of course, but a few of an infinite set of possibilities.

Maximum Length = df. Maximum perpendicular distance between transverse planes tangent to the projectile point.

Maximum Width = df. Maximum perpendicular distance between planes parallel to the longitudinal and tangent to the paired points on the projectile point.

Maximum Thickness = df. Maximum perpendicular distance between planes parallel to the coronal and tangent to paired points on the projectile point.

Basal Width = df. Distance on the coronal plane between ends of the base.

Shoulder Width = df. Distance on the coronal plane between lateral ends of shoulders.

Juncture Width = df. Distance on the coronal plane between junctures.

Haft Element Length = df. Perpendicular distance between the transverse plane which includes the junctures and the basal plane.

Haft Modification Width = df. Distance on the plane defining the haft modification between the two points of tangency.

These terms are linear measurements, but the capacity for defining specific proportional relationships between measurements is implicit. Ratios may be introduced by nominal definition and exact proportion stated by this. Alternately, proportion classes may be formed by the real number specification of an allowable range. In fact, virtually any defined term in the system can be metricised, largely as a result of the orderly nature of systems of nominal definitions. As another example, the precise angle of the haft modification may be measured between the plane which defines the modification and the basal plane. This may then be used as a metric variable, or specific classes defined by specifying a range for each.

The index of incurvature or excurvature of an edge may be defined as the straight line distance between the ends of the edge divided into the maximum perpendicular distance between that straight line and the edge. This ratio may then be sub-divided as desired by a statement that each

class contains ratios between two specified numbers. To permit a continuum of values from very incurvate to a very excurvate, incurvate values could be negative, being less in enclosed area than a straight line. Excurvate edges would then have positive values. This would permit the quantification of terms such as "nearly straight". The index value for a straight edge would be 0, and a plus or minus factor could be specified as being considered straight.

Summary

The title of this chapter is "Toward a Formal Account of Projectile Point Morphology" since this is by no means intended to be a final word on the subject. In the first place it has dealt with certain gross aspects of morphology such as shape and size and incompletely with these. Certain aspects of shape are not considered, such as cross-sections, and the metric attributes defined out of infinite choices are only those pertinent to the analysis contained within a typical report. Other important aspects of morphology such as flaking, fluting, or secondary edge modification by serration, beveling or grinding are not considered.

Many unconsidered morphological aspects are ready extensions of the extant system. For instance, serration could be readily defined as multiple vertices on a blade edge. Terms for describing the shape of the serrations are available, and quantification of size, number, position and density of serrations is no trouble. Beveling could possibly be defined in relation to transverse sections. On the other hand, definition of flaking styles probably requires an entire new branch of the system with a largely new set of primitives, and would be a major undertaking.

The problem of asymmetrical specimens also was not considered. As far as the derivation of nominally defined terms is concerned, asymmetry is of no great consequence. Most of the definitions are expressed in unilateral terms, and those which are not could be, with working changes. Asymmetry is more of a problem in classification, a unilateral process as performed herein. Some specification should be made as to side selection if this unilateral mode of classification is followed. If called for by need of the research, the artifact could be divided by the longitudinal plane and each half treated separately. In a detailed morphological analysis this would probably be the best method.

There are certain positive aspects of the study thus far. A basic core of primitives and nominally defined terms is forwarded which, if nothing else, standardizes these terms. It should be re-emphasized at this point that the definitions and the classifications are distinct. The set of nominal definitions is a system of specifically defined attributes of projectile point morphology. The classification system in this report represents a single potential use of these definitions. The methodology by which other needed terms of shape or even entire new branches of the system may be generated is introduced, if fleetingly. New primitives may be added if necessary, and the rules for combining terms to form definitions are stated. (In fact a completely different set of units and rules could be formulated which leads to a totally different set of definitions.) Thus, this account does present a set of basic building blocks

which can be combined, or if needed, increased, in ways tailored to the needs of a particular research problem.

As stated in the first paragraph a formal account consists of units and rules with a model building capacity. Indeed as a model consists of a representation of parts and their articulation, any formal account is a conceptual model of the studied phenomenon. In those admittedly rather general aspects of projectile point morphology to which this paper is addressed, there is a model building capacity which may claim some modest initial success. Hopefully, continued expansion and refinement will increase the utility of the system as an analytical tool.

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